

致：中华人民共和国商务部

中华人民共和国聚氯乙烯产业

反补贴调查申请书附件

(公开文本)

北京市天路律师事务所

二零二零年八月十八日

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- 一、申请企业授权委托书
- 二、支持企业授权委托书及支持函

一、申请企业授权委托书

授权委托书

委托方：新疆中泰化学股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：新疆中泰化学股份有限公司

授权代表： 许多辉

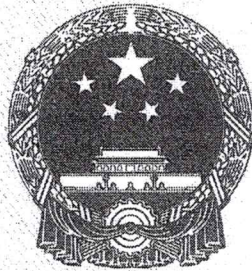


受托方：北京市天路律师事务所

授权代表： 高路



2020 年 5 月 8 日



تجارت كىشىسى 营业执照

(قوشۇمچە نۇسخا)

(副本)

2-1

بىرلىك كالىبى ئىجتىمائىي ئىدېنتىفىكاتسىيە ۋە كالىب ئورۇنى

统一社会信用代码 916500007318363110

نامى
تىپى
تۈرۈشلۈك ئورنى
ئورنى
قانۇنىي ۋەكىلى
قانونىي ۋەكىلى
تەمسىلچان كاپىتالى
تەمسىلچان كاپىتالى
قۇرۇلغان ۋاقتى
قۇرۇلغان ۋاقتى
تىجارەت مۇددىتى
تىجارەت مۇددىتى
تىجارەت دائىرىسى
تىجارەت دائىرىسى
تىجارەت دائىرىسى
تىجارەت دائىرىسى

新疆中泰化学股份有限公司

其他股份有限公司(上市)

新疆乌鲁木齐经济技术开发区阳澄湖路 39 号

王洪欣

贰拾壹亿肆仟陆佰肆拾肆万玖仟伍佰玖拾捌元人民币

2001 年 12 月 18 日

2001 年 12 月 18 日至 长期

食品添加剂氢氧化钠及盐酸、氢氧化钠(烧碱)、液氯、盐酸、次氯酸盐、次氯酸钠的生产、销售，1，1-二氯乙烷、碳化钙、煤焦油、硫磺、硫化钠、硝酸、氨、过氧化氢、硝酸钠、高锰酸钾、醋酸酐、三氯甲烷、乙醚、吡啶、甲苯、丙酮、甲基乙基酮、苯乙烯、乙烯、乙炔、氢、正乙烷、液化石油气、石油原油、汽油、粗苯、甲醇、苯酚、丙烷、氧(压缩的或液化的)、氮(压缩的或液化的)、二氧化碳(压缩的或液化的)、氨(压缩的或液化的)、氦(压缩的或液化的)、异辛烷、石脑油、1，2-二甲苯、1，3-二甲苯、1，4-二甲苯、二异丙胺、乙醇(无水)、乙醇溶液(按体积含乙醇大于24%)、正丁醇、洗油、柴油(闭环闪点≤60℃)、水合肼(含肼≤64%)、甲醛溶液、煤焦沥青、蒽油、三氯乙烯、酚油、漂白粉、氢氧化钾、亚硫酸钠、甲醇钠的销售；聚氯乙稀树脂、纳米PVC、食品容器、包装材料用聚氯乙稀树脂生产销售；塑料制品的生产和销售；化工产品、机电产品、金属材料、建筑材料的销售；仓储服务；金属制品的防腐和低压液化瓶的检验；一般货物与技术的进出口经营；货运代理；煤炭及制品的销售；房屋租赁；软件和信息信息技术服务；化纤浆粕制造；人造纤维、棉纺纱、化纤布、非织造布的生产与销售；商务信息技术咨询及服务；矿产品、机械设备、五金产品、电子产品、钢材、汽车、汽车配件、食品、烟草制品、酒、农产品、化肥的销售；道路普通货物运输、国际道路普通货物运输、机械设备租赁。(依法须经批准的项目，经相关部门批准后方可开展经营活动)



登记机关

新疆维吾尔自治区工商行政管理局

2017年 06月 14日

授 权 委 托 书

委托方：新疆天业（集团）有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。



委托方：新疆天业（集团）有限公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 04 月 26 日



(قوشۇمچە نۇسخا)

(副本) 2-1

سرلیککه که لکهن لیجنمائی لئاوت واکالت نوموړی

统一社会信用代码 91659001299898838W

名称
 类型
 住所
 法定代表人
 注册资本
 成立日期
 营业期限
 经营范围

新疆天业（集团）有限公司

有限责任公司(国有独资)

新疆石河子开发区北三东路 36 号

宋晓玲

叁拾贰亿元人民币

1996 年 06 月 28 日

1996 年 06 月 28 日 至 2026 年 06 月 27 日

氯碱生产销售。硫酸、盐酸、氢氧化钠（片碱、粒碱、固碱、液碱）次氯酸钙、次氯酸钠、石灰、高沸物（二氯乙烷）销售。道路普通货物运输。1,4-丁二醇、乙二醇、化学制品、固汞催化剂、水泥及水泥制品、塑料制品、碳酸钙、碳酸钠的生产与销售。钢材、建材、畜产品、机械设备、化工产品的销售。种植业、养殖业，节水农业技术推广，节水农业工程技术研究，进出口业务，国际货运代理服务，物业管理，自建铁路专用线的轨道运输。装卸与搬运，检测设备技术咨询与服务，机器设备租赁服务，模具、零配件加工与制作。广告设计、制作、发布及代理。仓储服务（危险化学品除外）、国内货物运输代理服务，代理报关、报检服务，计算机软件的开发与销售，信息技术服务与咨询，信息系统集成工程，网络综合布线工程，自动化控制系统，工业监控设施的销售、安装和维护，网站设计、制作和维护。农业规划设计，农业技术研发与推广、农作物的种植和销售、农产品的加工和销售。工程设计、施工、承包、技术转让。火力发电；供热；电、蒸汽的销售；电气试验。车辆租赁、餐饮服务。电石、煤及煤制品的销售。矿产品、金属材料的销售。（依法须经批准的项目，经相关部门批准后方可开展经营活动）

登 记 机 关 石河子工商行政管理局

2018 年 01 月 15 日



授权委托书

委托方：陕西北元化工集团股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

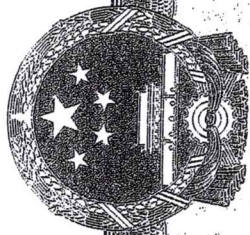


受托方：北京市天路律师事务所

授权代表：



2020年5月8日



营业执照

统一社会信用代码

91610821748622598U



扫描二维码登录“国家企业信用信息公示系统”了解更多登记、备案、许可、监管信息

(副本)₃₋₂



名称

陕西西北元化工集团股份有限公司

类型

其他股份有限公司(非上市)

法定代表人

刘国强

经营范围

聚氯乙烯、烧碱(含片状烧碱)、盐酸、液氯、电石、水泥、硫酸、次氯酸钠溶液(含有效氯 $\geq 5\%$)的生产、销售;聚乙烯、聚丙烯、多晶硅、金属镁、硅铁、纯碱、玻璃的销售;电力、热力的生产、供应及销售。(依法须经批准的项目,经相关部门批准后方可开展经营活动)

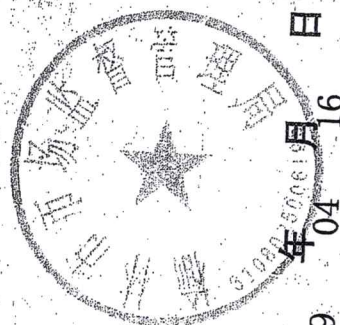
注册资本 叁拾贰亿伍仟万元人民币

成立日期 2003年05月06日

营业期限 长期

住所 陕西省榆林市神木市锦界工业园区

登记机关



授权委托书

委托方：天津大沽化工股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

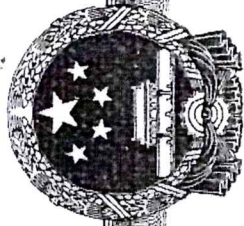
委托方：天津大沽化工股份有限公司

授权代表：王昕

受托方：北京市天路律师事务所

授权代表：高志

2020年4月27日



照 执 业 证

本副

统一社会信用代码

91120000103607112F



扫描、录入、统计、归档、
国家信息库、解案、管
理、企业、更多、信
息、行业、多、许、

名 称

天津人洁化工股份有限公司

刑 类

股份有限公司

法定代表人

张晔辉

經加犯罪

[illegible]

注册资本 壹拾壹亿伍仟柒佰伍拾万零壹佰陆拾柒元二角二分人民币

二〇〇〇年十二月二十日

营业期限 2000年12月20日至 2050年12月19日

住所 天津市滨海新区塘沽兴化道一号



登记机关

2020年01月20日

国家企业信用信息公示系统网址:

<http://www.gsxt.gov.cn>

市场主体应当于每年1月1日至6月30日通过国家企业信用信息公示系统报送公示年度报告，

国家市场监督管理总局

授权委托书

委托方：宜宾天原集团股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：宜宾天原集团股份有限公司

授权代表：



受托方：北京市天路律师事务所

授权代表：

高强



2020年4月26日



营业执照

统一社会信用代码 9151150020885067X6

名称	宜宾天原集团股份有限公司
类型	其他股份有限公司(上市)
住所	四川省宜宾临港经济技术开发区港园路二段61号
法定代表人	罗云
注册资本	柒亿捌仟零捌拾伍万柒仟零壹拾柒元整
成立日期	1994年01月01日
营业期限	1994年01月01日至长期
经营范围	基本化学原料, 有机合成化学原料, 化工产品制造、销售(含危险化工产品生产及本企业生产的危险化工产品销售, 其许可范围及有效期以许可证为准)及进出口贸易, 塑料制品, 压力容器, 电气维修, 电线电缆, 建材, 三级土建工程, 化工防腐, 化工机械制造安装, 电气仪表安装施工(需许可证的限取得许可的分公司经营); 生产医用氧(有效期以许可证为准); 香精香料的生产、销售(凭许可证经营); 电力业务(按许可证范围经营, 有效期至2029年6月16日止)。(依法须经批准的项目, 经相关部门批准后方可开展经营活动)



请于每年1月1日至6月30日报
公司住所、股权变更、企业行政许可、
企业行政处罚等信息产生后
应在20个工作日内公示。

登记机关

201年 9月 1日

二、支持企业授权委托书及支持函

支 持 函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：内蒙古君正化工有限责任公司

代表：



2020 年 4 月 26 日

授权委托书

委托方：内蒙古君正化工有限责任公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：内蒙古君正化工有限责任公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

支持函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：



代表：

2020 年 4 月 27 日

授权委托书

委托方：鸿达兴业股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：鸿达兴业股份有限公司

授权代表：



王明达

受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 26 日

支 持 函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称： 茌平信发聚氯乙烯有限公司

代表：



2020年4月27日

授 权 委 托 书

委托方：茌平信发聚氯乙烯有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：茌平信发聚氯乙烯有限公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

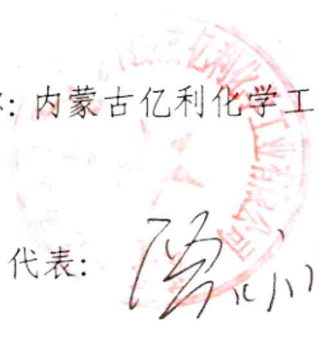
支持函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：内蒙古亿利化学工业有限公司

代表：



陈川吉

2020年4月27日

授 权 委 托 书

委托方：内蒙古亿利化学工业有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：内蒙古亿利化学工业有限公司

授权代表：

受托方：北京市天路律师事务所

授权代表：



支 持 函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：内蒙古鄂尔多斯电力冶金集团
股份有限公司氯碱化工分公司

代表：



2020年 4 月 27 日

授 权 委 托 书

委托方：内蒙古鄂尔多斯电力冶金集团股份有限公司氯碱化工分公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：内蒙古鄂尔多斯电力冶金集团股份有限公司氯碱化工分公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

支持函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：



代表：

A handwritten signature in black ink, appearing to be '张明' (Zhang Ming), written over a horizontal line.

2020年 4月 27日

授权委托书

委托方：中盐吉兰泰氯碱化工有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：



刘伟刚

受托方：北京市天路律师事务所



2020 年 4 月 27 日

支 持 函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：唐山三友氯碱有限责任公司



代 表：



2020年 4月 27日

授权委托书

委托方：唐山三友氯碱有限责任公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：唐山三友氯碱有限责任公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

支持函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：陕西金泰氯碱化工有限公司

代表：王振东

2020年4月27日

授权委托书

委托方：陕西金泰氯碱化工有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：陕西金泰氯碱化工有限公司

授权代表：



邵元金

受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

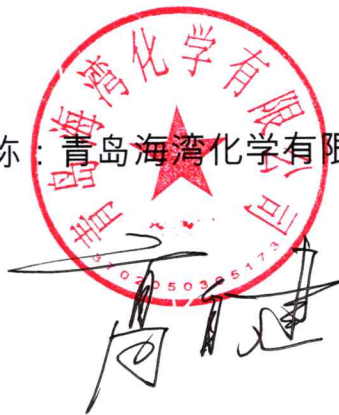
支 持 函

本企业作为国内聚氯乙烯生产企业之一，支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称：青島海湾化学有限公司

代表：



2020年4月27日

授 权 委 托 书

委托方：青岛海湾化学有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：青岛海湾化学有限公司

授权代表：



受托方：北京市天路律师事务所

授权代表：



2020 年 4 月 27 日

支 持 函

本企业作为国内聚氯乙烯生产企业之一,支持国内聚氯乙烯产业对进口聚氯乙烯产品提起反补贴调查申请。

特此声明。

企业名称 :宁夏金昱元化工集团股份有限公司

代表 : 尚兴

2020年4月27日

授权委托书

委托方：宁夏金昱元化工集团股份有限公司

受托方：北京市天路律师事务所

委托方在此委托北京市天路律师事务所作为委托方的代理人，全权代理委托方向中华人民共和国商务部申请对进口自美国的聚氯乙烯产品进行反补贴调查一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。

委托方：宁夏金昱元化工集团股份有限公司

授权代表：



授权代表：[Signature]

受托方：北京市天路律师事务所

授权代表：



2020年4月28日

附件二

天路律师事务所代理律师指派书

指派律师：高强、杨鹏

代理律师指派书

北京市天路律师事务所接受申请企业新疆中泰化学股份有限公司、新疆天业（集团）有限公司、陕西北元化工集团有限公司、天津大沽化工股份有限公司、宜宾天原集团股份有限公司及支持企业内蒙古君正化工有限责任公司、鸿达兴业股份有限公司、荏平信发聚氯乙烯有限公司、内蒙古亿利化学工业有限公司、内蒙古鄂尔多斯电力冶金集团股份有限公司氯碱化工分公司、中盐吉兰泰氯碱化工有限公司、唐山三友氯碱有限责任公司、陕西金泰氯碱化工有限公司、青岛海湾化学有限公司、宁夏金昱元化工集团股份有限公司（统称委托方）就对原产于美国的进口聚氯乙烯产品进行反补贴调查申请一案的委托，并指派我所律师高强、杨鹏作为委托方的代理人。

代理权限：全权代理委托方向中华人民共和国商务部申请对原产于美国的进口聚氯乙烯产品进行反补贴调查申请一案的有关事务，包括但不限于向国家主管部门提交申请材料、提出或变更有关的权利主张、向有关单位调查取证、参加听证会等。

委托期限至委托事项经法定程序终止时结束。



律师事务所执业许可证

统一社会信用代码: 31110000726373412Y

北京市天路

律师事务所, 符合《律师法》
及《律师事务所管理办法》规定的条件, 准予设立并
执业。

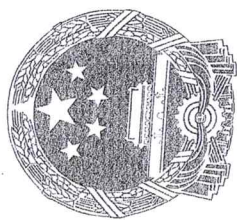


发证机关:

北京市司法局

发证日期:

2016 年 08 月 01 日



本证为持证人依法获准律师执业的有效证件。持证人执业应当出示本证，请司法机关和有关单位、个人予以协助。

中华人民共和国

律师执业证

Lawyer's License
People's Republic of China



中华人民共和国司法部

中华人民共和国司法部监制

执业机构 北京市天路律师事务所

执业证类别 专职律师

执业证号 11101199910835150

法律职业资格
或律师资格证号 京司律证字第 1620 号

发证机关 北京市司法局

发证日期 2017 年 05 月 09 日



高强 11101199910835150



持证人 高强

性 别 男

身份证号 11010819600910181X



律师年度考核备案

考核年度	二〇一九年度
考核结果	称 职
备案机关	北京市西城区司法局 专用章 2019年6月 - 2020年5月
备案日期	

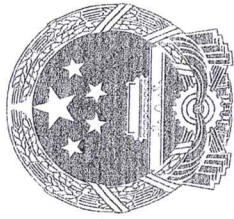
律师年度考核备案

考核年度	
考核结果	
备案机关	
备案日期	



本证为持证人依法获准律师执业
的有效证件。持证人执业应当出示本
证，请司法机关和有关单位、个人予以
协助。

中华人民共和国司法部



中华人民共和国
律师执业证
Lawyer's License
People's Republic of China



中华人民共和国司法部监制

执业机构 北京市天路律师事务所

执业证类别 专职律师

执业证号 11101200810789320

法律职业资格
或律师资格证号 20062103824

发证机关 北京市司法局

发证日期 2017 年 05 月 09 日



杨鹏 11101200810789320

持证人 杨鹏

性别 男

身份证号 372832197809084731



律师年度考核备案

考核年度	二〇一九年度	考核结果	称 职	备案机关	北京市西城区司法局 专用章 律师年度考核备案	备案日期	2019年6月 - 2020年5月
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律师年度考核备案

考核年度		考核结果		备案机关		备案日期	
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附件三

聚氯乙稀进出口情况的统计资料

(全国海关信息中心提供)

资讯

行情

企业

价格

贸易

专题

科技

统计

期刊

海关进出口产品产销国统计报表分析

产品编号: 39041090 统计年度: 2016年01 月 至 2016年12月

产品名称: 其他初级形状的聚氯乙烯, 未掺其他物质 (数量单位: 千克 金额单位: 美元)

年度: 2016				
产销国(地区)	进口数量	进口美元	出口数量	出口美元
阿尔巴尼亚	0	\$0	1230	\$742
阿尔及利亚	0	\$0	500256	\$1,142,916
阿富汗	0	\$0	3934	\$12,982
阿根廷	0	\$0	18000	\$10,760
阿拉伯联合酋长国	1	\$87	9415230	\$7,270,024
阿曼	0	\$0	4238000	\$3,022,240
埃及	0	\$0	36250	\$34,189
埃塞俄比亚	0	\$0	5828000	\$4,218,737
安哥拉	0	\$0	341975	\$275,895
奥地利	0	\$0	1600	\$2,240
澳大利亚	0	\$0	25200	\$17,397
巴布亚新几内亚	0	\$0	628800	\$511,244
巴基斯坦	0	\$0	29040458	\$22,388,350
巴拉圭	0	\$0	7800	\$9,360
巴林	0	\$0	52500	\$89,490
巴拿马	0	\$0	23500	\$2,895
巴西	0	\$0	49	\$66
比利时	110000	\$155,195	160000	\$113,931
波兰	19012	\$3,149	62440	\$50,540
布隆迪	0	\$0	86000	\$73,762
朝鲜	0	\$0	1167365	\$893,382
德国	9919140	\$13,997,697	50	\$1,635
多哥	0	\$0	360500	\$273,558
多米尼加共和国	0	\$0	22950	\$11,475
俄罗斯联邦	5	\$78	105550533	\$72,345,393
厄瓜多尔	0	\$0	55991	\$78,240
厄立特里亚	0	\$0	314700	\$470,093
法国	7292385	\$8,332,642	52500	\$41,288
菲律宾	0	\$0	1933125	\$1,543,388
斐济	0	\$0	178000	\$146,936
冈比亚	0	\$0	49500	\$33,702
刚果	0	\$0	128275	\$99,197
哥伦比亚	0	\$0	15112	\$40,943
哥斯达黎加	0	\$0	12350	\$17,463
格鲁吉亚	0	\$0	111500	\$86,535
古巴	0	\$0	358000	\$666,301
国别(地区)不详	185854	\$191,632	0	\$0
哈萨克斯坦	0	\$0	51135324	\$35,980,654
韩国	6813937	\$8,794,611	30222653	\$23,607,409
荷兰	400	\$2,884	1872	\$3,744
吉布提	0	\$0	5056435	\$3,796,174
吉尔吉斯	0	\$0	8184617	\$5,829,077
几内亚	0	\$0	9300	\$9,300
加拿大	0	\$0	363100	\$285,619
加纳	0	\$0	2440255	\$2,117,605
加蓬	0	\$0	140000	\$101,500
柬埔寨	0	\$0	55180	\$40,850
捷克共和国	0	\$0	165	\$512
津巴布韦	0	\$0	309426	\$244,546
喀麦隆	0	\$0	178000	\$160,388

卡塔尔	0	\$0	45000	\$53,391
科特迪瓦共和国	0	\$0	74750	\$58,390
科威特	0	\$0	528000	\$439,408
肯尼亚	0	\$0	34216685	\$25,537,160
老挝	0	\$0	5600	\$1,593
黎巴嫩	0	\$0	1000	\$1,080
立陶宛	875	\$1,627	0	\$0
利比亚	0	\$0	34000	\$22,610
留尼汪	0	\$0	401500	\$295,456
马达加斯加	0	\$0	520512	\$413,585
马拉维	0	\$0	280070	\$302,302
马来西亚	1147280	\$1,911,668	146938467	\$108,676,634
毛里求斯	0	\$0	1275575	\$971,066
毛里塔尼亚	0	\$0	102000	\$76,296
美国	260146689	\$198,157,537	170733	\$203,270
蒙古	0	\$0	185156	\$153,283
孟加拉国	0	\$0	41839838	\$31,253,841
秘鲁	0	\$0	155500	\$118,700
缅甸	0	\$0	40919732	\$28,752,735
摩洛哥	0	\$0	71800	\$64,831
莫桑比克	0	\$0	1425800	\$1,126,582
墨西哥	0	\$0	41594	\$37,812
南非	0	\$0	4636876	\$3,827,629
尼日利亚	0	\$0	19280890	\$14,752,968
挪威	53600	\$385,458	0	\$0
葡萄牙	0	\$0	226736	\$429,589
日本	138308386	\$119,192,957	2097	\$1,808
瑞典	592225	\$1,311,159	0	\$0
瑞士	13820	\$29,538	0	\$0
萨尔瓦多	0	\$0	100	\$395
塞拉利昂	0	\$0	111000	\$83,530
塞内加尔	0	\$0	295008	\$738,165
沙特阿拉伯	0	\$0	933350	\$730,875
斯里兰卡	100	\$421	6494625	\$4,970,071
苏丹	0	\$0	50000	\$40,250
塔吉克斯坦	0	\$0	3639964	\$2,709,206
台湾省	189039478	\$158,509,895	1856250	\$1,353,402
泰国	7476475	\$7,452,540	88962805	\$66,641,451
坦桑尼亚	0	\$0	6436729	\$4,899,905
突尼斯	0	\$0	35000	\$22,690
土耳其	25	\$178	3847800	\$2,896,816
土库曼斯坦	0	\$0	5797000	\$4,078,039
委内瑞拉	0	\$0	7000	\$5,454
乌干达	0	\$0	186000	\$130,820
乌克兰	0	\$0	328500	\$237,548
乌兹别克斯坦	0	\$0	51701144	\$37,516,676
西班牙	64700	\$84,690	0	\$0
希腊	0	\$0	43000	\$35,710
香港	397800	\$739,861	110	\$459
新加坡	7975	\$26,025	44380	\$54,880
新西兰	0	\$0	96000	\$56,640
匈牙利	25	\$404	0	\$0
叙利亚	0	\$0	688020	\$544,454
牙买加	0	\$0	49000	\$44,000
亚美尼亚	0	\$0	16500	\$14,306
也门共和国	0	\$0	503000	\$378,155
伊拉克	0	\$0	93500	\$74,333
伊朗	0	\$0	4974258	\$4,054,165
以色列	150	\$448	15000	\$14,550
意大利	12279	\$23,779	1800	\$810
印度	100	\$867	238547846	\$182,530,469

印度尼西亚	26212000	\$20,871,193	5951653	\$4,589,952
英国	55122	\$136,629	977081	\$811,582
约旦	0	\$0	225500	\$173,689
越南	0	\$0	62728925	\$46,059,708
赞比亚	0	\$0	36000	\$33,936
扎伊尔	0	\$0	363520	\$342,067
智利	0	\$0	326025	\$287,707
中华人民共和国	136760	\$111,560	0	\$0
2016	648006598	\$540,426,409	1038621304	\$772,903,551

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● 数据查询

● 参数查询

● 操作指南

● 常见问题

查询条件及结果显示

进出口类型:	进口	起止时间:	2017年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:			
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	771584738	千克	0	—	711,139,677

共查询到 1 条数据 每页显示条数 10 上页 下页 首页 末页 1 跳转



- 数据查询
- 参数查询
- 操作指南
- 常见问题

查询条件及结果展示

进出口类型:	进口	起止时间:	2018年1月-12月	币种:	美元
商品:	39041090				
贸易方式:	贸易伙伴: 收发货人注册地:				
关别:	运输方式:				

导出数据 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	736184638	千克	0	—	685,001,159

共查询到 1 条数据 每项显示条数 10 页 1 页 1 页 共 1 页 跳转



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进出口类型:	进口	起止时间:	2019年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:			
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙...	665272647	千克	0	—	581,605,443

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进出口类型:	进口	起止时间:	2017年1月-12月	币制:	美元
商品:	39041090	贸易伙伴:	502		
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	贸易伙伴编码	贸易伙伴名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	502	美国	306538527	千克	0	—	269,965,638

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海关统计数据在线查询平台

ENGLISH

数据查询

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进出口类型:	进口	起止时间:	2018年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:	502		
贸易方式:		收发货人注册地:			
关别:		运输方式:			

显示数据 返回设置

商品编码	商品名称	贸易伙伴编码	贸易伙伴名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚乙...	502	美国	318569405	千克	0	—	282,592,656

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数据查询

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查询条件及结果显示

进出口类型:	进口	起止时间:	2019年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:	502		
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	贸易伙伴编码	贸易伙伴名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	502	美国	296803541	千克	0	—	248,340,810

共查询到 1 条数据 每页显示条数 10

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数据查询

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查询条件及结果显示

进出口类型:	出口	起止时间:	2017年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:			
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	956265546	千克	0	—	784,448,272

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- 数据查询
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- 操作指南
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查询条件及结果显示

进出口类型:	出口	起止时间:	2018年1月-12月	币种:	美元
商品:	39041090	贸易伙伴:			
贸易方式:		收发货人注册地:			
关别:		运输方式:			

导出数据 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	591983887	千克	0	—	505,670,357

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● 数据查询

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問

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查询条件及结果展示

进出口类型:

出口

起止时间:

2019年1月-12月

币种:

美元

商品:

39041090

贸易伙伴:

贸易方式:

收发货人注册地:

关别:

运输方式:

↓ 导出数据

↺ 返回设置

商品编码	商品名称	第一数量	第一计量单位	第二数量	第二计量单位	美元
39041090	其他初级形状的聚氯乙烯...	507469744	千克	0	—	414,747,336

共查询到 1 条数据

每页显示条数 10

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附件四

申请人聚氯乙烯生产经营情况统计及
支持企业聚氯乙烯产能产量情况

(作保密处理)

附件五

全球聚氯乙烯产业概况以及 美国聚氯乙烯生产、消费的报告

（作保密处理）

关于全球聚氯乙烯产业概况以及美国聚氯乙烯生产、消费的报告的具体内容如下：

一、全球聚氯乙烯产业概况

聚氯乙烯是个全球性化工产品，世界上约 50 个国家和地区都有生产。全球聚氯乙烯的生产和消费主要集中在亚洲、美国和欧洲地区。2018 年全球产能约 5910 万吨，产量约 4280 万吨，消费量约 4080 万吨。

全球聚氯乙烯的下游消费主要集中在管材、型材、薄膜、电线电缆、地板革等领域，与建筑行业的关系紧密。

二、美国聚氯乙烯生产及消费情况

2018 年美国聚氯乙烯的主要生产企业有美国信科有限公司（Shintech Incorporated）、韦斯特莱克化学公司（Westlake Chemical Corporation）、西方化学公司（Occidental Chemical Corporation）、台湾塑胶工业股份有限公司（美国）（Formosa Plastics Corporation U.S.A.）等。

2018 年美国聚氯乙烯的产能、产量及消费量情况如下：

单位：万吨			
	产能	产量	消费量
美国	777	698	438.6

附件六

全国聚氯乙烯产能、产量情况统计

(中国氯碱工业协会提供)

全国聚氯乙烯产能、产量情况统计

一、全国聚氯乙烯生产能力、产量

本协会统计的 2016 年至 2019 年全国聚氯乙烯生产能力、产量数据如下：

		2016 年	2017 年	2018 年	2019 年
产能	万吨	2201	2269	2279	2399
产量	万吨	1582	1687	1767	1912

注：生产能力、产量数据为聚氯乙烯纯粉的统计数据，不包含糊树脂。

二、国内聚氯乙烯产业产能、产量

在全国聚氯乙烯生产企业中，有一些企业与此次反补贴调查申请中被申请调查国家的聚氯乙烯生产企业存在关联关系，本协会统计的国内聚氯乙烯产业如下产能产量情况不含上述企业数据。

		2016 年	2017 年	2018 年	2019 年
产能	万吨	2188	2256	2266	2386
产量	万吨	1572	1678	1757	1900

注：表中数据为聚氯乙烯纯粉的统计数据，不包含糊树脂。



附件七

其他相关证据

- 一、海关进出口税则
- 二、人民币兑美元汇率

一、海关进出口税则

中华人民共和国 海关进出口税则

十位编码·监管条件·申报目录·出口退税·政策法规·海关代征税一览表

2016年中英文对照版(附光盘)

中华人民共和国海关进出口税则 编委会 编

Customs Import and Export Tariff
of the People's Republic of China

Decade Coding of HS, Customs Control Conditions, Declares Contents,
Export Drawback, Regulations, Detailed Customs Duties Levied on Commission Basis

Compiled by the Editorial Department of the Customs
Import and Export Tariff of the People's Republic of China



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税则号列	货 品 名 称	最惠 (%)	普通 (%)	增值 税率	出口 退税	计量 单位	监管 条件	Article Description
39.02	初级形状的丙烯或其他烯烃聚合物;							Polymers of propylene or of other olefins, in primary forms;
3902.1000	-聚丙烯		45	17	13	千克		-Polypropylene
3902.1000 ^W 10	电工级初级形状聚丙烯树脂(灰分含量不大于30ppm)	3	45	17	13	千克		Polypropylene resin, in primary forms, electrical grade (ash content ≤ 30ppm)
3902.1000 90	其他初级形状的聚丙烯	6.5	45	17	13	千克		Other polypropylene, in primary forms
3902.2000	-聚异丁烯	6.5	45	17	5	千克	AB	-Polyisobutylene
	-丙烯共聚物:							-Propylene copolymers;
3902.3010	---乙烯-丙烯共聚物(乙丙橡胶)	6.5	45	17	5	千克		---Ethylene-propylene copolymers
3902.3090	---其他	6.5	45	17	5	千克		---Other
3902.9000	-其他	6.5	45	17	5	千克		-Other
3902.9000 10	端羧基聚丁二烯, CTPB (作粘接剂或燃料)	6.5	45	17	5	千克	3	Carboxyl-terminal polybutadiene, CTPB (used as adhesive or fuel)
3902.9000 20	端羟基聚丁二烯, HTPB (作粘接剂或燃料)	6.5	45	17	5	千克	3	Hydroxyl-terminal polybutadiene, HTPB (used as adhesive or fuel)
3902.9000 90	其他初级形状的烯烃聚合物	6.5	45	17	5	千克		Other polymers of olefins, in primary forms
39.03	初级形状的苯乙烯聚合物;							Polymers of styrene, in primary forms;
	-聚苯乙烯:							-Polystyrene;
3903.1100	--可发性的	6.5	45	17	5	千克		--Expansible
	--其他:							--Other;
3903.1910	---改性的	6.5	45	17	13	千克		---Modified
3903.1990	---其他	6.5	45	17	5	千克		---Other
3903.2000	-苯乙烯-丙烯腈(SAN)共聚物	12	45	17	5	千克		-Styrene-acrylonitrile (SAN) copolymers
	-丙烯腈-丁二烯-苯乙烯(ABS)共聚物:							-Acrylonitrile-butadiene-styrene (ABS) copolymers;
3903.3010	--改性的	6.5	45	17	13	千克		--Modified
3903.3090	--其他	6.5	45	17	5	千克		--Other
3903.9000	-其他	6.5	45	17	5	千克		-Other
39.04	初级形状的氯乙烯或其他卤化烯烃聚合物;							Polymers of vinyl chloride or of other halogenated olefins, in primary forms;
	-聚氯乙烯,未掺其他物质:							-Poly(vinyl chloride), not mixed with any other substances;
3904.1010	--糊树脂	6.5	45	17	13	千克		--Paste resins
3904.1090	--其他	6.5	45	17	13	千克		--Other
3904.1090 01	聚氯乙烯纯粉(纯指未掺其他物质)	6.5	45	17	13	千克		Poly(vinyl chloride)(not mixed with any other substances) in powder
3904.1090 90	其他初级形状的纯聚氯乙烯(纯指未掺其他物质)	6.5	45	17	13	千克		Other poly(vinyl chloride)(not mixed with any other substances)
	-其他聚氯乙烯:							-Other poly(vinyl chloride);
3904.2100	--未塑化	6.5	45	17	13	千克		--Non-plasticized
3904.2200	--已塑化	6.5	45	17	13	千克		--Plasticized
3904.3000	-氯乙烯-乙酸乙烯酯共聚物	9	45	17	5	千克		-Vinyl chloride-vinyl acetate copolymers
3904.4000	-其他氯乙烯共聚物	12	45	17	5	千克		-Other vinyl chloride copolymers
3904.5000	-偏二氯乙烯聚合物	6.5	45	17	5	千克		-Vinylidene chloride polymers
	-氟聚合物:							-Fluoro-polymers;
3904.6100	--聚四氟乙烯	10	45	17	13	千克		--Polytetrafluoroethylene
3904.6900	--其他	6.5	45	17	13	千克		--Other
3904.9000	-其他	10	45	17	5	千克		-Other



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经济日报出版社

税则号列	货品名称	最惠国税率 (%)	普通税率 (%)	出口税率 (%)	计征单位	监管条件	Article Description
	第一章 初级形状						I. PRIMARY FORMS
39.01	初级形状的乙烯聚合物:						Polymers of ethylene, in primary forms:
3901.1000	-聚乙烯, 比重小于 0.94		45	17	13	千克	-Polyethylene having a specific gravity of less than 0.94
3901.1000*01	初级形状比重 ≤ 0.94 的聚乙烯(进口 CIF 价高于 3800 美元/吨)	3	45	17	13	千克	Polyethylene having a specific gravity of less than 0.94, in primary forms (CIF > US\$3800/ton)
3901.1000 90	初级形状比重 ≤ 0.94 的聚乙烯	6.5	45	17	13	千克	Polyethylene having a specific gravity of less than 0.94, in primary forms
3901.2000	-聚乙烯, 比重在 0.94 及以上		45	17	13	千克	-Polyethylene having a specific gravity of 0.94 or more
3901.2000*01	初级形状比重 ≥ 0.94 的聚乙烯(进口 CIF 价高于 3800 美元/吨)	3	45	17	13	千克	Polyethylene having a specific gravity of 0.94 or more in primary forms (CIF > US\$3800/ton)
3901.2000 90	初级形状比重 ≥ 0.94 的聚乙烯	6.5	45	17	13	千克	Polyethylene having a specific gravity of 0.94 or more, in primary forms
3901.3000	-乙烯-乙酸乙烯酯共聚物	6.5	45	17	5	千克	-Ethylene-vinyl acetate copolymers
	-乙烯- α -烯烃共聚物, 比重小于 0.94,						-Ethylene- α -olefin copolymers, having a specific gravity of less than 0.94,
3901.4010	--乙烯-丙烯共聚物(乙丙橡胶)	6.5	45	17	5	千克	--Ethylene-propylene copolymers
3901.4020	--线性低密度聚乙烯	6.5	45	17	13	千克	--Linearity low density polyethylene
3901.4090	--其他:	6.5	45	17	13	千克	--Other
	--其他:						--Other
3901.9010	--乙烯-丙烯共聚物(乙丙橡胶)	6.5	45	17	5	千克	--Ethylene-propylene copolymers
3901.9090	--其他	6.5	45	17	13	千克	--Other
39.02	初级形状的丙烯或其他烯烃聚合物:						Polymers of propylene or of other olefins, in primary forms:
3902.1000	-聚丙烯		45	17	13	千克	-Polypropylene
3902.1000*10	电工级初级形状聚丙烯树脂(灰分含量不大于 30ppm)	3	45	17	13	千克	Polypropylene resin, in primary forms, electrical grade (ash content ≤ 30 ppm)
3902.1000 90	其他初级形状的聚丙烯	6.5	45	17	13	千克	Other polypropylene, in primary forms
3902.2000	-聚异丁烯	6.5	45	17		千克	-Polyisobutylene
	-丙烯共聚物:						-Propylene copolymers:
3902.3010	--乙烯-丙烯共聚物(乙丙橡胶)	6.5	45	17	5	千克	--Ethylene-propylene copolymers
3902.3090	--其他	6.5	45	17	5	千克	--Other
3902.9000	-其他	6.5	45	17	5	千克	-Other
3902.9000 10	端羧基聚丁二烯, CTPB(作粘接剂或燃料)	6.5	45	17	5	千克	3 Carboxyl-terminal polybutadiene, CTPB (used as adhesive or fuel)
3902.9000 20	端羟基聚丁二烯, HTPB(作粘接剂或燃料)	6.5	45	17	5	千克	3 Hydroxyl-terminal polybutadiene, HTPB (used as adhesive or fuel)
3902.9000 90	其他初级形状的烯烃聚合物	6.5	45	17	5	千克	Other polymers of olefins, in primary forms
39.03	初级形状的苯乙烯聚合物:						Polymers of styrene, in primary forms:
3903.1100	-聚苯乙烯:						-Polystyrene:
	--可发性的	6.5	45	17	5	千克	--Expandable
	--其他:						--Other
3903.1910	--改性的	6.5	45	17	13	千克	--Modified
3903.1990	--其他	6.5	45	17	5	千克	--Other
3903.2000	-苯乙烯-丙烯腈(SAN)共聚物	12	45	17	5	千克	-Styrene-acrylonitrile (SAN) copolymers
	-丙烯腈-丁二烯-苯乙烯(ABS)共聚物:						-Acrylonitrile-butadiene-styrene (ABS) copolymers:
3903.3010	--改性的	6.5	45	17	13	千克	--Modified
3903.3090	--其他	6.5	45	17	5	千克	--Other
3903.9000	-其他	6.5	45	17	5	千克	-Other
39.04	初级形状的氯乙烯或其他卤化烯烃聚合物:						Polymers of vinyl chloride or of other halogenated olefins, in primary forms:
	-聚氯乙烯, 未掺其他物质:						-Poly(vinyl chloride), not mixed with any other substances:
	--糊树脂	6.5	45	17	13	千克	--Paste resins
	--其他	6.5	45	17	13	千克	--Other
3904.1010	--糊树脂	6.5	45	17	13	千克	Poly(vinyl chloride) (not mixed with any other substances) in powder
3904.1090	--其他	6.5	45	17	13	千克	Other poly(vinyl chloride) (not mixed with any other substances)
3904.1090 01	聚氯乙烯纯粉(纯指未掺其他物质)	6.5	45	17	13	千克	Other poly(vinyl chloride):
	其他初级形状的纯聚氯乙烯(纯指未掺其他物质)						Other poly(vinyl chloride):
	--其他聚氯乙烯:	6.5	45	17	13	千克	--Non plasticized
	--未塑化	6.5	45	17	13	千克	--Plasticized
	--已塑化						



中华人民共和国 海关进出口税则

十三位编码·监管条件·出口退税·政策法规·海关代征税一览表

2019年中英文对照版（修订版）

中华人民共和国海关进出口税则 编委会 编

Customs Import and Export Tariff
of the People's Republic of China

Decade Coding of HS, Customs Control Conditions, Export Drawback,
Regulations, Detailed Customs Duties Levied on Commission Basis

Compiled by the Editorial Department of the Customs
Import and Export Tariff of the People's Republic of China



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经济日报出版社



二、人民币兑美元汇率

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汇率

Exchange Rate

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Exchange Rate

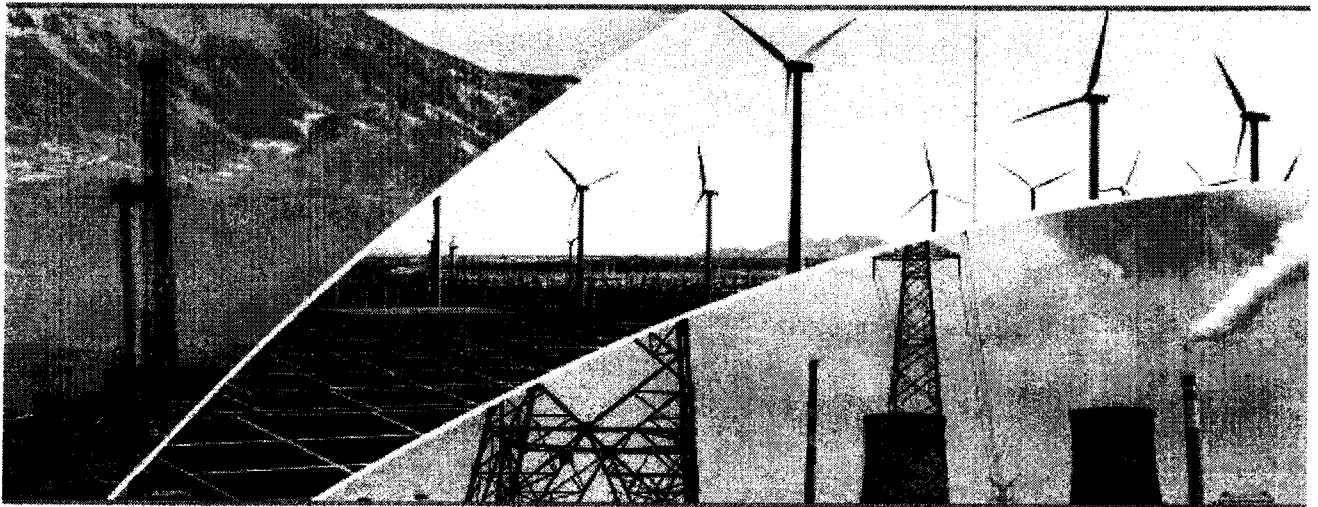
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附件八

**美国能源信息署（EIA）《2019 年能源展望》
（Annual Energy Outlook 2019, AEO 2019）**

Annual Energy Outlook 2019

with projections to 2050



Department of Energy
U.S. Energy Information
Administration

#AEO2019

January 24, 2019
www.eia.gov/aeo

2. Energy Consumption by Sector and Source

(Quadrillion Btu, unless otherwise noted)

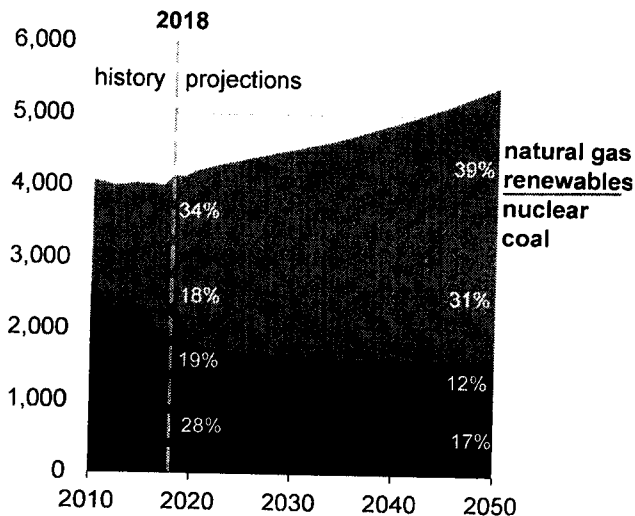
Sector and Source	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	
Residential																																			
Propane	0.49	0.50	0.48	0.45	0.44	0.43	0.41	0.40	0.39	0.38	0.36	0.35	0.34	0.33	0.31	0.30	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10
Distillate Fuel Oil (DFO)	0.48	0.49	0.48	0.43	0.42	0.41	0.39	0.38	0.37	0.36	0.35	0.34	0.33	0.31	0.30	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.10	
Petroleum and Other Liquid Fuels	0.97	0.99	0.96	0.88	0.87	0.85	0.83	0.81	0.79	0.78	0.76	0.75	0.74	0.73	0.71	0.70	0.68	0.67	0.66	0.65	0.64	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	0.53	0.52	0.51	
Natural Gas	4.58	5.02	4.97	4.81	4.79	4.77	4.75	4.73	4.71	4.69	4.68	4.67	4.65	4.63	4.61	4.59	4.57	4.55	4.53	4.51	4.49	4.47	4.45	4.43	4.41	4.39	4.37	4.35	4.33	4.31	4.29	4.27	4.25	4.23	
Renewable Energy (RE)	0.17	0.44	0.45	0.44	0.43	0.43	0.42	0.42	0.41	0.41	0.40	0.40	0.39	0.39	0.38	0.38	0.37	0.37	0.36	0.36	0.35	0.35	0.34	0.34	0.33	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.26	0.25	
Electricity	4.70	4.99	4.93	4.93	4.91	4.90	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.89		
Electricity Related Losses	10.82	11.43	11.30	11.27	11.20	11.10	11.05	11.00	10.95	10.90	10.85	10.80	10.75	10.70	10.65	10.60	10.55	10.50	10.45	10.40	10.35	10.30	10.25	10.20	10.15	10.10	10.05	10.00	9.95	9.90	9.85	9.80	9.75	9.70	
Total	19.89	21.14	20.79	20.44	20.13	19.88	19.69	19.55	19.38	19.27	19.18	19.13	19.08	19.03	18.98	18.93	18.88	18.83	18.78	18.73	18.68	18.63	18.58	18.53	18.48	18.43	18.38	18.33	18.28	18.23	18.18	18.13	18.08	18.03	
Commercial																																			
Propane	0.15	0.16	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16		
Motor Gasoline (M)	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37		
Distillate Fuel Oil (DFO)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Petroleum and Other Liquid Fuels	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37		
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Renewable Energy (RE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Electricity	0.86	0.89	0.92	0.89	0.89	0.88	0.88	0.87	0.87	0.86	0.86	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85		
Electricity Related Losses	1.38	1.42	1.43	1.39	1.40	1.39	1.38	1.39	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38		
Total	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14		
Industrial																																			
Propane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Motor Gasoline (M)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Distillate Fuel Oil (DFO)	1.17	1.12	1.13	1.25	1.25	1.26	1.26	1.27	1.27	1.27	1.28	1.28	1.29	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	
Petroleum and Other Liquid Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Natural Gas	2.43	2.47	2.50	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49		
Renewable Energy (RE)	8.87	8.53	8.52	8.75	8.95	9.11	9.19	9.26	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32		
Electricity	8.22	8.53	8.52	8.75	8.95	9.11	9.19	9.26	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32		
Electricity Related Losses	1.63	1.61	1.60	1.58	1.61	1.65	1.68	1.72	1.75	1.78	1.81	1.83	1.86	1.88	1.90	1.92	1.94	1.97	2.00	2.03	2.06	2.09	2.12	2.15	2.18	2.21	2.24	2.27	2.30	2.33	2.36	2.39	2.42	2.45	
Total	17.96	18.27	18.05	18.07	17.96	17.85	17.75	17.70	17.63	17.54	17.44	17.34	17.24	17.14	17.04	16.94	16.84	16.74	16.64	16.54	16.44	16.34	16.24	16.14	16.04	15.94	15.84	15.74	15.64	15.54	15.44	15.34	15.24	15.14	
Transportation																																			
Propane	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
Motor Gasoline (M)	16.47	16.46	16.47	16.36	16.07	15.76	15.47	15.17	14.87	14.57	14.27	13.97	13.67	13.37	13.07	12.77	12.47	12.17	11.87	11.57	11.27	10.97	10.67	10.37	10.07	9.77	9.47	9.17	8.87	8.57	8.27	7.97	7.67	7.37	
Distillate Fuel Oil (DFO)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Petroleum and Other Liquid Fuels	16.47	16.46	16.47	16.36	16.07	15.76	15.47	15.17	14.87	14.57	14.27	13.97	13.67	13.37	13.07	12.77	12.47	12.17	11.87	11.57	11.27	10.97	10.67	10.37	10.07	9.77	9.47	9.17	8.87	8.57	8.27	7.97	7.67	7.37	
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Renewable Energy (RE)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Electricity Related Losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total	16.47	16.46	16.47	16.36	16.07	15.76	15.47	15.17	14.87	14.57	14.27	13.97	13.67	13.37	13.07	12.77	12.47	12.17	11.87	11.57	11.27	10.97	10.67	10.37	10.07	9.77	9.								

Delivered Energy	27.94	28.02	28.22	27.48	27.59	27.35	27.02	26.48	26.24	26.07	25.48	25.10	24.81	24.73	24.56	24.48	24.32	24.26	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.25	24.23	24.2
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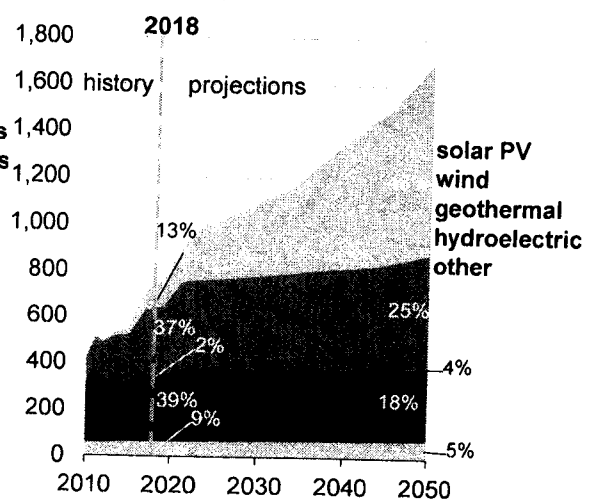
Energy Use & Related Statistics																																			
Oilfield Energy Use																																			
Total Energy Use	72.62	74.92	75.47	75.56	75.69	75.66	75.64	75.56	75.55	75.54	75.50	75.68	75.63	75.66	75.71	75.72	75.82	75.96	76.18	76.48	76.87	77.17	77.49	77.84	78.15	78.51	78.84	79.45	79.91	80.42	80.98	81.39	0.96		
Ethanol Consumed in Motor Gasoline and E85	97.41	100.13	100.36	100.18	100.06	99.89	99.54	99.30	99.15	99.07	99.19	99.23	99.16	99.19	99.06	99.04	98.95	99.27	99.58	99.92	100.37	100.76	101.15	101.55	101.92	102.33	102.84	103.44	104.07	104.67	105.35	105.91	106.55	0.74	
Petroleum (million)	1.23	1.22	1.33	1.23	1.23	1.22	1.21	1.21	1.19	1.18	1.17	1.17	1.16	1.15	1.13	1.12	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.14	1.14	1.14	1.15	1.17	1.17	-0.16	
Gross Domestic Product (Billion 2000 Dollars)	325.92	328.36	330.70	333.05	335.39	337.71	340.03	342.39	344.54	346.76	348.96	351.13	353.33	355.50	357.62	359.70	361.74	363.17	364.94	366.75	368.51	370.22	371.89	373.53	375.13	376.71	378.25	379.78	381.29	382.79	384.26	385.76	387.24	388.73	0.54
Carbon Dioxide Emissions (million metric tons)	17.096	17.582	18.099	18.487	18.792	19.102	19.411	19.750	20.116	20.495	20.893	21.315	21.726	22.157	22.592	23.024	23.459	23.870	24.348	24.790	25.245	25.713	26.188	26.675	27.162	27.671	28.197	28.718	29.261	29.801	30.361	30.910	31.460	32.006	1.94
CO2e (carbon dioxide equivalent)	5,147.0	5,249.7	5,316.5	5,315.7	5,050.2	5,038.0	5,014.8	4,994.3	4,976.7	4,958.6	4,935.1	4,927.3	4,919.8	4,903.0	4,886.8	4,871.1	4,855.8	4,841.5	4,827.7	4,814.3	4,801.5	4,788.7	4,776.3	4,764.3	4,752.7	4,741.6	4,730.6	4,719.7	4,708.7	4,698.0	4,686.7	4,675.4	4,663.8	-0.16	
1/ Includes wood used for electricity																																			
2/ Includes wood used for ethanol																																			
3/ Includes heat pumps, solar thermal water heating, and electricity generation from wind and solar photovoltaic sources																																			
4/ Excludes ethanol																																			
5/ Includes electricity generation from wind and solar photovoltaic sources																																			
6/ Includes electricity generation from wind and solar photovoltaic sources																																			
7/ Includes ethanol, natural gas, and other plants that have a non-regulatory status, and small on-site generating systems																																			
8/ Includes petroleum (oil, asphalt, and refinery debris)																																			
9/ Represents natural gas used in well, oil, and refinery operations, and in natural gas processing plant machinery																																			
10/ Fuel used in facilities that produce natural gas for export																																			
11/ Excludes consumption of energy produced from conventional hydroelectric, wind and wood waste, municipal waste, and other biomass sources																																			
12/ Includes ethanol in motor gasoline																																			
13/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for these projections																																			
14/ Includes only renewable type																																			
15/ Diesel fuel for on- and off- road use																																			
16/ Represents aviation gasoline and kerosenes																																			
17/ Represents consumption attributable to the factors above																																			
18/ Does not include residential use of kerosene																																			
19/ Includes aviation gasoline, petroleum coke, kerosene, road oil, lubricants, still gas, and miscellaneous petroleum products																																			
20/ Includes electricity generated for sale to the grid and for use from renewable sources, and non-electric energy from renewable sources																																			
21/ Excludes ethanol and nonrenewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal water heaters																																			
22/ Includes consumption of energy by electricity-only and combined heat and power plants that have a regulatory status																																			
23/ These values represent the energy obtained from solar thermal when it is used in a light water reactor. The total energy content of uranium is much larger, but alternative processes are required to use advantage of it																																			
24/ Includes conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes net electricity imports																																			
25/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
26/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
27/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
28/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
29/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
30/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
31/ Includes Conventional hydroelectric, geothermal, wind and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic, and solar thermal sources. Excludes ethanol, net electricity imports, and nonrenewable energy consumption for geothermal heat pumps																																			
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Electricity generation from natural gas and renewables increases, and the shares of nuclear and coal generation decrease—

**Electricity generation from selected fuels
(Reference case)**
billion kilowatthours



**Renewable electricity generation, including
end-use (Reference case)**
billion kilowatthours



—as lower natural gas prices and declining costs of renewable capacity make these fuels increasingly competitive

- The continuing decline in natural gas prices and increasing penetration of renewable electricity generation have resulted in lower wholesale electricity prices, changes in utilization rates, and operating losses for a large number of baseload coal and nuclear generators.
- Generation from both coal and nuclear is expected to decline in all cases. In the Reference case, from a 28% share in 2018, coal generation drops to 17% of total generation by 2050. Nuclear generation declines from a 19% share of total generation in 2018 to 12% by 2050. The share of natural gas generation rises from 34% in 2018 to 39% in 2050, and the share of renewable generation increases from 18% to 31%.
- Assumptions of declining costs and improving performance make wind and solar increasingly competitive compared with other renewable resources in the Reference case. Most of the wind generation increase occurs in the near term, when new projects enter service ahead of the expiration of key federal production tax credits.
- Solar Investment Tax Credits (ITC) phase down after 2024, but solar generation growth continues because the costs for solar continue to fall faster than for other sources.

附件九

英国海外发展研究所（ODI）和国际石油变革组织（OCI）

关于美国补贴石油、天然气和煤炭生产的报告

(G20 Subsidies to oil, gas and coal

production: United States)



G20 subsidies to oil, gas and coal production: United States

Alex Doukas



This country study is a background paper for the report **Empty promises: G20 subsidies to oil, gas and coal production** by Oil Change International (OCI) and the Overseas Development Institute (ODI). It builds on research completed for an earlier report **The fossil fuel bailout: G20 subsidies to oil, gas and coal exploration**, published in 2014.

For the purposes of this country study, production subsidies for fossil fuels include: national subsidies, investment by state-owned enterprises, and public finance. **A brief outline of the methodology can be found in this country summary.** The full report provides a more detailed discussion of the methodology used for the country studies and sets out the technical and transparency issues linked to the identification of G20 subsidies to oil, gas and coal production.

The authors welcome feedback on both this country study and the full report to improve the accuracy and transparency of information on G20 government support to fossil fuel production.

A Data Sheet with data sources and further information for the United States' production subsidies is available at:
<http://www.odi.org/publications/10086-g20-subsidies-oil-gas-coal-production-united-states>

priceofoil.org
odi.org

Argentina
Australia
Brazil
Canada
China
France
Germany
India
Indonesia
Italy
Japan
Korea (Republic of)
Mexico
Russia
Saudi Arabia
South Africa
Turkey
United Kingdom
► **United States**

Country Study
November 2015

Background

Over the past several years, fossil fuel production has sharply increased in the United States. While coal production has declined slightly, oil and gas exploration and production continue to expand rapidly, with natural gas production increasing by 22% and oil production increasing by 59% between 2010 and 2014 (EIA, 2015b). Production and exploration growth in the US have been driven by horizontal drilling and hydraulic fracturing (fracking) technology, which enabled the development of previously unreachable reserves of oil and gas from shale and tight formations. Producer subsidies have also reduced risk and boosted returns in the US, helping to drive the supply growth that has made the US the world's largest producer of both oil and natural gas, ahead of Saudi Arabia and Russia (EIA, 2015b, 2015c). In 2014, the US produced more oil than Iran, China and Canada combined.

US President Barack Obama has repeatedly pledged to tackle climate change and eliminate US domestic and overseas subsidies for fossil fuels, but he has met resistance in the US Congress, and the administration's domestic energy strategy remains focused on an 'all-of-the-above' approach, which supports the expansion of fossil fuel production (The White House, 2015).

While upstream oil, gas and coal production continues apace, downstream production of electricity from fossil fuels is undergoing a major shift in the US, with natural gas (and to a lesser degree, renewable energy) crowding out coal, and with dozens of coal-fired power plants being shuttered due to local and national advocacy efforts (Grunwald, 2015). US electricity sector emissions in 2015 are expected to be more than 15% below 2005 levels, and in 2015 alone, analysts expect coal plant retirements amounting to roughly 7% of current US electricity generation (BNEF, 2015).

Recent action by the US Environmental Protection Agency in the form of the 'Clean Power Plan' rules will have further implications for the electricity sector, with the aim of reducing CO₂ emissions from electricity production to 32% below 2005 levels by 2030.

Despite this trend of decline in coal-fired power production, government support for coal mining and coal-fired power continues, as does support for oil and gas production. These support measures are described in detail below.

National subsidies

Annually, US federal and state governments give away \$20.5 billion in subsidies for oil, coal and gas production (Table 1 lists the top five subsidies by amount, as well as total US subsidies disaggregated by industry). The analysis identified an annual average of \$17.2 billion in subsidies for fossil fuel producers at the federal level, and \$3.3 billion at the state level. Only a handful of the largest fossil fuel-producing states were assessed as part of this analysis.

The federal subsidies to fossil fuel producers represent an increase of 35% over levels when President Obama took office in 2009, in spite of calls to remove several major subsidies in every budget that the Obama administration has sent to Congress. This uptick in subsidies reflects the substantial increase in oil and gas producing activities in the US during that time.

The vast majority of US national and state subsidies, by both volume and number of subsidies, come in the form of tax breaks and royalty relief, rather than direct spending. Tax and royalty exemptions for oil and gas producers are among the largest federal subsidies for fossil fuel production in the United States.

Among the largest of the quantifiable subsidies to US oil and gas producers are corporate tax exemptions for master limited partnerships (MLPs), which stood at \$3.9 billion when estimated in 2012 (Koplow, 2013). MLPs are corporate structures that are able to avoid corporate-level income taxes entirely, and which can distribute cash to owners on a tax-deferred basis. Oil and gas producers dominate MLPs, with 77% of MLPs by market capitalisation associated with fossil fuels. Fossil fuel MLPs have grown from a market capitalisation of \$325 billion in 2013 to \$532 billion as of May 2015 (Koplow, 2015), although recent declines in oil and gas prices may dampen the tax benefits (and thus associated subsidy) of MLPs for the time being.

Another large tax break for oil and gas producers is the deduction for intangible drilling costs, which our analysis found to be worth \$2.6 billion annually. This provides a 100% tax deduction for costs not directly part of the final operating oil or gas well (such as labour costs, survey work and ground clearing), including exploration and development costs (Committee for a Responsible Federal Budget, 2013a). Similarly, the percentage depletion allowance is assessed as the excess of percentage over cost depletion for oil and gas producers. This measure, estimated annually to cost \$1 billion for oil and gas, and a further \$200 million for coal, allows independent fossil fuel producers to deduct 14% to 15% of large investment costs, including for exploration, from income taxes. One more accounting practice, the 'last-in, first-out' accounting practices employed by oil and gas companies, is also estimated to cost taxpayers more than \$1 billion annually. This accounting method allows a company to report the value of every good sold as that of the most recent one added to its inventory (Committee for a Responsible Federal Budget, 2013b). This effectively allows companies with physical inventories to overstate the cost of production, lowering their reported (rather than actual) income.

Lost royalties on offshore drilling represent another large subsidy to oil and gas producers. The 1995 Deep Water Royalty Relief Act provided royalty relief for leases sold between 1996 and 2000, in water 200 metres or deeper (Taxpayers for Common Sense, 2009).

This royalty relief is estimated to represent a loss to taxpayers of \$2.1 billion in 2014. In addition, a number of leases issued during the period of the Act did not include price thresholds that would trigger royalties as intended, reportedly due to a clerical error, which could cost taxpayers billions in additional foregone revenues (ibid).

One of the factors that sets the US apart from other G20 countries is the sheer variety of tax loopholes for fossil fuel producers. The deduction for oil spill remediation costs allows companies to deduct the cost of cleaning up and addressing the effects of oil spills as a standard business expense. A recent and notable example occurred in 2010 when BP (formerly British Petroleum) claimed a \$9.9 billion tax deduction due to \$32.2 billion in reported clean-up costs for the Deepwater Horizon exploration drilling rig blowout and the oil spill in the Gulf of Mexico. The value of this subsidy is projected to be \$679 million in 2014, although it is difficult to calculate exact amounts because the value of this tax deduction is considered confidential in most cases, and because the level of subsidy is highly dependent on the number and extent of spills that incur remediation costs, which can vary greatly from year to year.

In 2015, BP settled remaining federal and state claims related to the spill for \$20.8 billion. Despite public concern over BP's previous deduction of clean-up costs loopholes that allow for settlements to be deducted as business expenses persist (Morgenson, 2013). The bulk of the \$20.8 billion settlement may be tax-deductible, with only a \$5.5 billion fine that makes up part of the settlement being clearly delineated as a cost that cannot be classified as a business expense. Despite the painful lesson from BP's first

conversion of the massive clean-up costs into expenses, it appears this same loophole may remain applicable to BP's new settlement.

Also on the offshore oil and gas front, a number of newer subsidies are benefiting exploration for extreme forms of fossil fuels – those that are difficult to reach and expensive to produce, despite the fact that the vast majority of already-proven fossil fuel reserves can never be burned if there is a chance of avoiding the worst impacts of climate change (see full report, *Empty promises: G20 subsidies to oil, gas and coal production*). For example, in the case of Arctic oil exploration carried out by Shell, the US Coast Guard's top officer recently indicated that substantial Coast Guard resources, including a vessel that was being used to prevent cocaine smuggling (Gardner, 2015), had been diverted to monitor Shell's drilling activities, although this particular subsidy is not quantified here, as it is not within the scope of this analysis.

While the bulk of US subsidies to fossil fuel producers benefit the oil and gas sector, coal producers also benefit from significant subsidies: the Powder River Basin is not designated as a coal-producing region, despite supplying approximately 40% of US coal and being the largest coal reserve in the US. This lack of official designation allows coal companies to lease federal lands at costs lower than would otherwise be the case, amounting to a subsidy of more than \$1 billion per year when last calculated in 2012 (Sanzillo, 2012). In addition to underpricing federal leases, as is the case with the application of oil and gas royalties described above, the federal process for assessing royalties on coal also contain loopholes that amount to a significant subsidy. Instead of assessing royalties on the

Table 1: US national subsidies to fossil fuel production, 2013–2014 (\$ million except where stated otherwise)

Subsidy	Subsidy type	Targeted energy source	Stage	2013 estimate	2014 estimate	Estimated annual average amount
Corporate tax exemption for master limited partnerships	Tax expenditure	Oil and gas	Production	3,931	3,931	3,931
Intangible drilling oil and gas deduction	Tax expenditure	Oil and gas	Production	3,490	1,663	2,577
Lost royalties on offshore drilling (Outer Continental Shelf Deep Water Royalty Relief Act)	Tax expenditure	Oil and gas	Extraction	576	2,120	1,348
Excess of percentage over cost depletion	Tax expenditure	Oil and gas	Extraction	1,100	1,000	1,050
Powder River Basin not designated as a coal-producing region	Tax expenditure	Coal	Extraction	1,047	1,047	1,047
Other national and state subsidies (see Data Sheet)				10,561	10,944	10,538
Total national subsidies (\$ m)						20,491

Sources and additional data are available in the Data Sheets that accompany each Country Study.

ultimate sale price of coal produced on federal lands, the government assesses royalties on the price of the initial sale (Lee-Ashley and Thakar, 2015). This occurs even when a parent company sells coal to one of its own affiliate companies, and the affiliate then re-sells the coal to foreign buyers at a higher price. The impact of this particular subsidy is not included in the total US subsidies due to a lack of available recent estimates, but a 2012 investigation by Reuters estimated that this loophole cost \$40 million in tax revenue on coal exports from Wyoming and Montana in 2011 (Rucker, 2012). The US Department of Interior's Bureau of Land Management launched a high-level review, in part to reassess this loophole, in July 2015.

Recent research has found that production subsidies in the Powder River Basin equal nearly \$8 per tonne, a total of \$2.9 billion per year, and that removal of these subsidies would result in an 8% to 29% reduction in demand for coal from the basin, with associated cumulative reductions of 0.7 to 2.5 GtCO₂ to 2035, demonstrating the significant potential climate impact of removing these production subsidies (CTI et al., 2015).

Some of the largest US subsidies for fossil fuel producers are actually state-level tax breaks. An example is the Texas severance tax exemption for natural gas, a subsidy worth \$811 million annually. Among major oil, gas and coal-producing states, Texas and Alaska each provide subsidies to producers totalling more than \$1 billion annually.

There are also a number of subsidies that are not quantified here, either because numbers are not available or possible to readily estimate, and also because certain types of support may not meet the definition of subsidy. Some other recent state-level developments on subsidies are also out of the scope of being quantified for the purposes of this assessment, but they present illustrations of how US subsidies for fossil fuel producers are playing out during a rapid decline in global oil prices. For example, in Alaska, an oil and gas production tax is expected to cost taxpayers more than it brings in for fiscal years 2015 and 2016 (Box 10 in the full report, *Empty promises: G20 subsidies to oil, gas and coal production*). Despite being designed as a tax to generate revenue for the state, because of the types of tax breaks and credits available to producers, this particular tax is expected to result in a net cost to Alaskans of \$442 million. These subsidies are not quantified in the total amount for national subsidies because they are for 2015 and 2016, and this analysis considers the period from 2013 to 2014.

In another example, for the past several years, Pennsylvania has been one of the major gas-producing states in the country, yet has lacked any severance tax on natural gas, representing a huge windfall to producers. However, because this is a standing zero tax rate and not an exemption or deduction, it is not counted as a subsidy here. But it is important to recognise that the list

of producer subsidies presented here is not an exhaustive accounting of those subsidies and similar types of government support that benefit producers and represent a loss to treasuries.

State-owned enterprise investment

The US does not have state-owned enterprises (SOEs) engaged in upstream oil, gas and coal production. However, the federal government does own several utilities that produce and sell coal-fired electricity, including the Tennessee Valley Authority and the Western Area Power Administration (which sells power from one coal-fired power plant owned and operated by a collection of federal, state and municipal agencies).

Of these, the largest generator of electricity from fossil fuels is the Tennessee Valley Authority, which operates 11 gigawatts (GW) of coal-fired generating capacity and approximately 9 GW of gas-fired generating capacity (Tennessee Valley Authority, n.d.). It is also worth noting that the Western Area Power Administration's Navajo Generating Station is the third-largest point source of carbon dioxide emissions in the US (EPA, 2015a). Data on investment in fossil fuel production by these federally-owned utilities was not readily available, and is not included in this analysis.

There are also several municipally owned utilities in the US that produce and sell electricity generated in part by coal or natural gas. Although a full analysis of investment by these multiple, relatively small utilities is not within the remit of this study, the largest of these is City Water, Light and Power in Illinois, which operates fossil fuel electricity generating assets with a combined nameplate capacity of 723 MW (City Water, Light and Power, 2015), which produced 2.9 TWh of electricity in their fiscal year ending 2014 (Burns, 2014).

Public finance

Domestic

There was no significant public financing for fossil fuels domestically found from independent US government agencies. The US Department of Agriculture operates the Rural Utilities Service, which provides loans and loan-guarantees at interest rates below those available to investor-owned utilities. The total value of all of these preferential loans and guarantees, as well as federal support to federally owned utilities, was estimated at \$30 million for 2013 (EIA, 2015a). There are also some government-backed loan opportunities for small businesses, including those in the energy sector, as well as financing opportunities for R&D.

International

US public finance for overseas fossil fuel projects totalled \$7.5 billion in 2013 and 2014 – an annual average of \$3.7 billion. It was dominated by financing from the US Export-Import Bank (ExIm), with additional significant amounts from the US portion of ownership in the major multilateral development banks. Bilaterally, the US provides billions of dollars in loans and guarantees each year for overseas oil, gas and coal projects through ExIm and, to a much smaller extent, through the Overseas Private Investment Corporation (OPIC) (Table 2).

Notably, OPIC has instituted measures to limit greenhouse gas emissions from projects that it funds, resulting in a far smaller amount of fossil fuels financed from 2013 to 2014 (\$126 million) compared with ExIm, which financed \$5.8 billion to fossil fuel projects from 2013 to 2014. Further, the US commitment to stop funding coal power plants overseas except in extreme circumstances has meant lower coal financing in recent years from both ExIm and OPIC. The Obama administration has also sought to apply emissions restrictions to ExIm, an effort that has suffered setbacks as a result of Congressional actions that have deferred or defunded the implementation of ExIm's restrictions on investment in high-emitting infrastructure. At the time of writing, ExIm's Congressional authorisation has lapsed, which means that it is not committing funding to any new investments for the time being.

Other US government agencies, including the Millennium Challenge Corporation, the US Agency for International Development, and the US Trade Development Agency provide public financing for energy projects, but

there is not enough publicly available information to determine the amount of financing from these institutions going to fossil fuels, and therefore these agencies were not included in the tallies. The Millennium Challenge Corporation, in particular, 'expects to invest approximately \$2 billion to support Power Africa through compacts that improve the quality and reliability of electricity and promote climate-smart measures', and, given Power Africa's emerging focus, a portion of that financing is likely to go to natural gas infrastructure and power plants (MCC, 2015).

The US also contributed an annual average of \$743 million to fossil fuel projects in 2013 and 2014 through its shares in the World Bank Group, African Development Bank, Asian Development Bank, Inter-American Development Bank and European Bank for Reconstruction and Development.

Private companies

Private upstream oil and gas companies

US oil and gas production has boomed in recent years, with oil production at nearly 2 billion barrels in 2009 climbing to nearly 3.2 billion barrels by 2014. Natural gas production has risen from 26 trillion cubic feet to nearly 32 trillion cubic feet over the same period (EIA, 2015b, 2015c).

No single player dominates the upstream US oil and gas industry: between 2013 and 2014, 37 oil and gas companies produced an average of at least 150 million

Table 2: US public finance for fossil fuel production, 2013–2014 (\$ million except where stated otherwise)

Institution name	Coal mining	Coal-fired power	Upstream oil and gas	Oil and gas pipelines, power plants and refineries	Total fossil fuel finance 2013 & 2014	Annual avg. fossil fuel finance
Domestic						
N/A	-	-	-	-	-	-
Subtotal domestic	-	-	-	-	-	-
International						
Export-Import Bank of the United States	79	-	5,097	682	5,858	2,929
Overseas Private Investment Corporation	-	-	68	58	126	63
Multilateral development banks	2	220	400	863	1,485	743
Subtotal international	81	220	5,565	1,603	7,469	3,735
Totals						
Total public finance (\$ m)						3,735

Sources and additional data are available in the Data Sheets that accompany each Country Study.

Note: N/A indicates data was not publicly available at the time of publication.

barrels of oil equivalent (mboe) annually (Table 3). ExxonMobil, ConocoPhillips, Chesapeake, Anadarko and Chevron, all headquartered in the US, were the top five producers by volume of combined oil and gas production. Oil production is more concentrated than gas production, with ConocoPhillips accounting for nearly 6.5% of production and Chevron and ExxonMobil each accounting for nearly 6% of US oil production in 2014.

It is notable that a number of the world's vertically integrated 'supermajor' oil and gas companies that are headquartered in the US are also major players in the US market, across upstream, midstream and downstream oil and gas activities. These companies include ExxonMobil, ConocoPhillips and Chevron.

One of the biggest US subsidies benefiting the upstream oil and gas industry is the intangible drilling oil and gas deduction, described in the section on national subsidies, worth an average of \$2.6 billion annually between 2013 and 2014.

Private midstream/downstream oil and gas companies

As of 1 January 2015, approximately 46% of US oil refining capacity was concentrated among five companies, detailed in Table 4 (EIA, 2015d).

The US downstream oil and gas sector receives substantial subsidies. One of the largest of these is the benefit conferred by 'last-in, first-out' (LIFO) accounting, described in the section on national subsidies. This subsidy averaged nearly \$1.1 billion between 2013 and 2014.

For the midstream oil and natural gas sector, pipelines also benefit substantially from subsidies in the form of

industry-specific favourable tax treatment. Tax exemptions through the MLP structure also benefit many oil and gas pipelines, which benefit from the ability to recover 'phantom' taxes through regulated rates charged to customers (Koplow, 2013). The total of MLP-related subsidy was estimated at \$3.9 billion annually between 2013 and 2014, with a portion of that flowing to midstream oil and gas.

Private coal companies

More than 90% of coal production in the US is bituminous and sub-bituminous coal (split roughly evenly between the two), with lignite and anthracite accounting for 7.8% and 0.2% of US coal production in 2013 respectively (EIA, 2015e).

In 2013, for the first time in two decades, total US coal production was below 905 million tonnes. The share of US coal that is exported has remained roughly steady over the past several years, at between 11% and 12% of production (ibid.).

The top four US coal producers are also headquartered in the US (Table 5). The market capitalisation of these companies has declined precipitously in recent years as the prospects for coal in the US diminish: the market capitalisation of these four companies stood at just \$1.2 billion in mid-2015, compared to \$22 billion in 2010 (*The Economist*, 2015).

Major subsidies to the upstream coal industry include the failure to designate the Powder River Basin as a coal-producing region, costing an average of \$1.1 billion per year, as well as direct spending in the form of treasury

Table 3: Top private upstream oil and gas producers in the US, 2013–2014

Company	Headquarter country	Oil production (million barrels in country)		Gas production (billion cubic metres in country)		Sum of operating expenditure & capital expenditure, including exploration expenditure (\$ million)		Profitability (from country operations, as measured by free cash flow) (\$ million)	
		2013	2014	2013	2014	2013	2014	2013	2014
ExxonMobil	United States	181	186	47	43	13,620	14,340	1,638	1,071
ConocoPhillips	United States	194	205	20	20	10,034	11,381	2,188	1,347
Chesapeake	United States	72	75	38	35	7,935	7,659	-339	81
Anadarko	United States	102	133	29	31	9,145	10,775	-432	-340
Chevron	United States	184	188	15	15	11,900	11,007	1,161	1,895
BP	United Kingdom	139	152	19	19	8,624	8,575	2,170	2,677
Devon Energy	United States	98	123	23	22	7,682	7,497	-1,061	101
EOG Resources	United States	134	173	14	14	8,766	10,533	27	255
BHP-Billiton	Australia	69	109	17	18	7,915	7,181	-1,872	1,063
Southwestern Energy	United States	3	12	25	28	3,427	3,791	-796	-296

Source: Rystad Energy, 2015.

contributions to the Black Lung Disability Trust Fund, which averaged \$304 million per year.

Private electricity companies (fossil fuel-based)

From the perspective of electricity generation, the US power sector is made up of a mix of publicly owned utilities, investor-owned utilities, non-utility generators, electric cooperatives, and a few federal power agencies. In terms of total generation, investor-owned utilities and non-utility generators (also called independent power producers) are the dominant players. As of 2013, investor-owned utilities and non-utility generators made up a combined 79% of generation in the US, producing roughly equal amounts of electricity (American Public Power Association, 2015). The US generated 4 TWh of electricity in 2014, of which 39% was from coal, 27% from natural gas, 19% from nuclear, 6% from hydropower and 7%

from other renewables including wind and solar (EIA, 2015f).

The electricity sector was responsible for 31% of US greenhouse gas emissions in 2013 (EPA, 2015b), more emissions than any other sector of the economy. The US Environmental Protection Agency has released a final 'Clean Power Plan' rule that aims to cut greenhouse gas emissions from existing power plants.

Producers of electricity from fossil fuels benefit from several US subsidies, including a favourable amortisation period for pollution control technologies on coal-fired power plants, estimated to be worth \$400 million annually. Likewise, a credit for investment in 'clean coal' facilities also cost an average of \$190 million annually over the 2013–2014 period, alongside a carbon dioxide sequestration credit worth an average of \$80 million annually.

Table 4: Private companies operating in the US downstream oil and gas sectors

Company	Refinery locations	Capacity (million barrels per day)
Valero	Texas, Tennessee, Louisiana, California, Oklahoma	1.96
ExxonMobil	Texas, Louisiana, Illinois, California, Montana	1.86
Marathon Petroleum	Louisiana, Texas, Kentucky, Illinois, Michigan, Ohio	1.73
Phillips 66	Louisiana, Texas, New Jersey, Oklahoma, California, Washington, Montana	1.61
Motiva	Texas, Louisiana	1.08

Source: EIA (2015d).

Table 5: Top 5 private coal producers by production and profit in the US, 2013–2014

Company	Headquarter country	Coal production (in country) – thousand tonnes, 2013	Percentage of total US coal production, 2013	Profit (from country operations, if possible) (varying metrics)	Countries in which the company operates producing assets (if global profit)
Peabody Energy	United States	166,264	18.6	\$814 million (2014 adjusted EBITDA) *	United States, Australia
Arch Coal	United States	118,147	13.2	\$280 million (2014 adjusted EBITDA)	United States
Cloud Peak Energy	United States	77,740	8.7	\$202 million (2014 adjusted EBITDA)	United States
Alpha Natural Resources	United States	77,053	8.6	\$498 million (2014 adjusted EBITDA)	United States
Rio Tinto Group	United Kingdom	56,154	6.3	US coal production not disaggregated in earnings reports	

Source: EIA (2015e).

Notes: * EBITDA refers to earnings before interest, taxes, depreciation, and amortisation.

Methodology

(for detailed methodology see Chapter 3 of main report)

This report compiles publicly available information on G20 subsidies to oil, gas and coal production across G20 countries in 2013 and 2014. It provides a baseline to track progress on the phase-out of such subsidies as part of a wider global energy transition. It uses the following terms and their definitions.

Production subsidies

Government support for fossil fuel production. For the purpose of this country study, production subsidies include national subsidies, investment by state-owned enterprises (SOEs) (domestic and international) and public finance (domestic and international) specifically for fossil fuel production.

Fossil fuel production

Production in the oil, gas and coal sectors. This includes access, exploration and appraisal, development, extraction, preparation, transport, plant construction and operation, distribution and decommissioning. Although subsidies for the consumption of fossil fuels can support their production, this report excludes such subsidies as well as subsidies for the consumption of fossil fuel-based electricity.

National subsidies

Direct spending, tax and duty exemptions and other mechanisms (such as forms of capacity markets) provided by national and sub-national governments to support fossil fuel production. Normally, the value assigned for a national subsidy is the number provided by the government's own sources, by the OECD, or by an independent research institution.

State-owned enterprise (SOE) investment

A SOE is a legal entity created by a government to undertake commercial activities on its behalf. SOEs can be wholly or partially owned by governments.

It is difficult to identify the specific component of SOE investment that constitutes a subsidy, given the limited publicly available information on government transfers to SOEs (and vice-versa), and on the distribution of investment within their vertically integrated structures. Therefore, this report provides data on total investment by SOEs in fossil fuel production (where this information is available from the company), which are presented separately from national subsidies.

For the purpose of this report, 100% of the support provided to fossil fuel production through domestic and international investment by an SOE is considered when a government holds >50% of the shares.

Public finance

Public finance includes the provision of grants, equity, loans, guarantees and insurance by majority government-owned financial institutions for domestic and international fossil fuel production. Public finance is provided through institutions such as national and multilateral development banks, export credit agencies and domestic banks that are majority state-owned.

The transparency of investment data for public finance institutions varies. Assessing the portion of total financing that constitutes a subsidy requires detailed information on the financing terms, the portion of finance that is based directly on public resources (rather than raised on capital markets) or that depends on the institutions' government-linked credit rating. Few of the institutions assessed allow public access to this information. Therefore, we report the total value of public finance from majority government-owned financial institutions for fossil fuel production separately from 'national subsidy' estimates.

For the purpose of this report, 100% of the support provided to fossil fuel production through domestic and international financing is considered when a government holds >50% of the shares in the bank or financial institution.

References

- American Public Power Association (2015) *US Electric Utility Industry Statistics*. Arlington: APPA. (www.publicpower.org/files/PDFs/USElectricUtilityIndustryStatistics.pdf)
- Bast, E., Makhijani, S., Pickard, S. and Whitley, S. (2014) 'The Fossil Fuel Bailout: G20 Subsidies for Oil, Gas, and Coal Exploration'. London: Overseas Development Institute (<http://www.odi.org/publications/8678-fossil-fuel-bailout-g20-subsidies-oil-gas-coal-exploration>)
- Bloomberg New Energy Finance (BNEF) (2015) 'Medium-term outlook for US power: 2015 = deepest de-carbonization ever'. BNEF White Paper, 8 April. (http://about.bnef.com/content/uploads/sites/4/2015/04/BNEF_2015-02_AMER_US-Power-Fleet-De-Carbonisation-WP.pdf)
- Burns, C. (2014) 'Office of Public Utilities, City of Springfield, Illinois, Continuing Disclosure Statement.' (www.cwlp.com/index/financialdata/ElecFundContinuingDisclosureFY14.pdf)
- City Water, Light and Power (2015) *Electric Generation*. Illinois: CWLP. (www.cwlp.com/electric/generation/generation.html)
- Committee for a Responsible Federal Budget (2013a) *The tax break-down: Intangible drilling costs*. (www.cfrb.org/blogs/tax-break-down-intangible-drilling-costs)
- Committee for a Responsible Federal Budget (2013b) *The tax break-down: LIFO accounting*. (www.cfrb.org/blogs/tax-break-down-lifo-accounting)
- Carbon Tracker Initiative (CTI), Energy Transition Advisors (ETA), Earth Track and Institute for Energy Economics and Financial Analysis (IEEFA) (2015) 'A Framework for Assessing Thermal Coal Production Subsidies'. London: CTI. (<http://www.carbontracker.org/report/coal-subsidies/>)
- Doukas, A. and Ballesteros, A. (2015) 'Clean energy access in developing countries: perspectives on policy and regulation'. Washington, D.C.: World Resources Institute. (www.wri.org/sites/default/files/clean-energy-access-developing-countries-issue-brief.pdf)
- Energy Information Administration (EIA) (2015a) 'Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013'. 12 March 2015. Washington, D.C.: EIA (www.eia.gov/analysis/requests/subsidy/)
- EIA (2015b) 'Natural Gas Gross Withdrawals and Production'. 31 August 2015. Washington, D.C.: EIA. (www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_FGW_mmcf_a.htm)
- EIA (2015c) 'Crude Oil Production'. 31 August 2015. Washington, D.C.: EIA. (www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbbl_a.htm)
- EIA (2015d) 'Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2015'. Washington, D.C.: EIA. (www.eia.gov/petroleum/refinerycapacity/table5.pdf)
- EIA (2015e) *Annual Coal Report 2013*. Washington, D.C.: EIA. (www.eia.gov/coal/annual/pdf/acr.pdf)
- EIA (2015f) 'What is US electricity generation by energy source?' Washington, D.C.: EIA. (www.eia.gov/tools/faqs/faq.cfm?id=427&t=3)
- Environmental Protection Agency (EPA) (2015a) *2013 Greenhouse Gas Emissions from Large Facilities*. Washington, D.C.: EPA. (<http://ghgdata.epa.gov/ghgp/main.do>)
- EPA (2015b) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013*. Washington, D.C.: EPA. (www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf)
- Gardner, T. (2015) 'US Coast Guard sees added burden in Shell's Arctic quest'. *Reuters*, 11 August. (<http://www.reuters.com/article/2015/08/11/us-usa-coastguard-arctic-idUSKCN0QG1VK20150811>)
- Grunwald, M. (2015) 'Inside the war on coal'. *Politico: The Agenda*, 27 May. (www.politico.com/agenda/story/2015/05/inside-war-on-coal-000002)
- Koplow, D. (2013) 'Too Big to Ignore: Subsidies to Fossil Fuel Master Limited Partnerships'. Washington, D.C.: Oil Change International. (http://priceofoil.org/content/uploads/2013/07/OCI_MLP_2013.pdf)
- Koplow, D. (2015) 'MLPs and the continuing growth of corporate tax avoidance in the energy sector'. *Earth Track*, 15 May. (www.earthtrack.net/blog/mlps-and-continuing-growth-corporate-tax-avoidance-energy-sector)
- Lee-Ashley, M. and Thakar, N. (2015) 'Cutting Subsidies and Closing Loopholes in the U.S. Department of the Interior's Coal Program'. Washington, D.C.: Center for American Progress. (<https://www.americanprogress.org/issues/green/report/2015/01/06/103880/cutting-subsidies-and-closing-loopholes-in-the-u-s-department-of-the-interiors-coal-program/>)
- Millennium Challenge Corporation (MCC) (2015) 'MCC and Power Africa'. Washington, D.C.: MCC. (<https://www.mcc.gov/resources/doc/factsheet-mcc-and-power-africa>)
- M.J. Bradley and Associates LLP (2015) *Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States*. Bank of America, Calpine, Entergy, Exelon, Public Service Enterprise Group (PSEG), Ceres, and the Natural Resources Defense Council (NRDC). (www.nrdc.org/air/pollution/benchmarking/files/benchmarking-2015.pdf)
- Morgenson, G. (2013) 'Paying the Price, but Often Deducting It'. *New York Times*, 12 January. (www.nytimes.com/2013/01/13/business/paying-the-price-in-settlements-but-often-deducting-it.html?_r=0)
- Rucker, P. (2012) 'Asia coal export boom brings no bonus for U.S. taxpayers'. *Reuters*, 4 December. (www.reuters.com/article/2012/12/04/us-usa-coal-royalty-idUSBRE8B30IL20121204?irpc=932)

- Rystad Energy (2015) 'Rystad Energy UCube Upstream Database'. Oslo: Rystad Energy. (www.rystadenergy.com/Databases/UCube)
- Sanzillo, T. (2012) 'The Great Giveaway: An analysis of the United States' long-term trend of selling federally-owned coal for less than fair market value.' Cleveland: Institute for Energy Economics & Financial Analysis. (<http://ieefa.org/study-almost-30-billion-in-revenues-lost-to-taxpayers-by-giveaway-of-federally-owned-coal-in-powder-river-basin/>)
- Taxpayers for Common Sense (2009) *Oil and gas royalties: relief for oil and gas companies, a fiscal headache for taxpayers*. (http://taxpayer.net/user_uploads/file/Energy/OilandGas/Royalty_Fact_Sheet_2009.pdf)
- Tennessee Valley Authority (n.d.) *Fossil-Fuel Generation* (www.tva.com/power/fossil.htm)
- The Economist (2015) 'Black Moods'. 6 June. (www.economist.com/news/business/21653622-coals-woes-are-spreading-it-still-has-its-fans-black-moods)
- The White House (2015) 'Advancing American Energy.' (<https://www.whitehouse.gov/energy/securing-american-energy>)



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附件十

**美国能源信息署（EIA）《2016 年财政年度联邦政府
对能源的直接财政干预和补贴报告》
(Direct Federal Financial Interventions and Subsidies in
Energy in Fiscal Year 2016)**



Independent Statistics & Analysis

U.S. Energy Information
Administration

Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2016

April 2018



This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

Overview and Key Findings

Overview

This report—an update based on Fiscal Year (FY) 2016 data and earlier EIA reports on direct federal financial interventions and subsidies in energy markets—continues a series of U.S. Energy Information Administration (EIA) reports¹ that began in response to congressional requests. More recently, the Secretary of Energy requested updated information as part of the U.S. Department of Energy's (DOE) Grid Resiliency Study.²

The scope of this EIA report is limited to direct federal financial interventions and subsidies, i.e., subsidies provided by the federal government, subsidies that provide a financial benefit with an identifiable federal budget impact, and subsidies that are specifically targeted at energy technologies and markets. State and local programs—although significant in a number of cases—have been excluded from EIA's reporting. As a result, this report does not encompass all subsidies that affect energy markets and should therefore be viewed in context and in conjunction with related information from other sources (see discussion of *Other energy subsidy studies* in the *Analytic Approach* section).

Consistent with EIA's independent role and mission, this report focuses on providing information to inform discussion rather than drawing conclusions or discussing policy issues related to energy subsidies. By using a comprehensive data acquisition and analysis process, EIA estimates how federal financial actions are distributed among a defined set of categories comprising the U.S. energy system.³ EIA has made only limited observations of the scale, trends, and relationships within the data and the report tables.

Table 1 summarizes total within-scope energy subsidies and selected U.S. energy system indicators.

Subsidy types

Federal financial interventions and subsidies included in this report fall into four categories:

- **Tax expenditure:** the amount of tax benefits or preferences received by taxpayers and forgone by the federal government
- **Direct expenditures** to recipients (i.e., both producers and consumers): the amount of grants, loans, or other financial assistance awards made directly to recipients
- **Research and development (R&D) support:** the amount of grants, loans, or other financial assistance awards made for R&D

¹ The first EIA study was undertaken at the request of Congress in Fiscal Year (FY) 1992, pursuant to language appearing in the House Appropriations Committee's Report on the U.S. Energy Information Administration FY 1992 appropriations.

² U.S. Department of Energy, Staff Report to the Secretary on Electricity Markets and Reliability, Washington, DC, August 2017.

³ EIA has requested further detailed data from the Internal Revenue Service as it pertains to the distribution of energy-related tax benefits.

- **DOE loan guarantees:** financial support authorized to be provided by DOE for innovative clean energy technologies that are typically unable to obtain conventional private financing because of their high technology risks.⁴

Table 1. Total energy subsidies and support and selected energy indicators, FY 2010, FY 2013, and FY 2016

trillion British thermal units or as specified

Indicators	FY 2010	FY 2013	FY 2016
Total Energy Subsidies and Support (million 2016 dollars)	37,992	29,335	14,983
U.S. Energy Consumption	96,850	98,655	96,788
U.S. Energy Production	73,695	81,151	84,833
U.S. Natural Gas (dry and liquids)	24,105	28,220	32,652
U.S. Crude Oil	11,512	15,370	18,797
U.S. Coal	21,657	20,223	14,807
U.S. Nuclear	8,318	8,099	8,352
U.S. Biomass	4,358	4,680	4,963
U.S. Hydroelectric	2,588	2,582	2,482
U.S. Wind	863	1,557	2,038
U.S. Solar	88	205	533
U.S. Geothermal	207	215	209

Note: Totals may not equal the sum of components due to independent rounding.

Sources: **Consumption:** EIA, *Monthly Energy Review*, February 2018, Table 1.3. **Production:** EIA, *Monthly Energy Review*, February 2018, Table 1.2. **Tax expenditure estimates:** Office of Management and Budget, *Analytical Perspectives, Budget of the U.S. Government*, FY 2012, 2015, and 2018. Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014*, JCS-3-10 (Washington, DC, December 2010), Table 1, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2012-2017*, JCS-1-13 (Washington, DC, February 2013), Table 1, and Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020*, JCS-3-17 (Washington, DC, January 2017), Table 1. **Federal direct expenditure and R&D expenditure subsidies:** DOE: U.S. Department of Energy, Office of the Chief Financial Officer, *Base Financial Data*, FY 2010, FY 2013, and FY 2016; FY 2010 and FY 2013: U.S. General Services Administration, *USASpending.gov* - Government spending at your fingertips, <https://www.usaspending.gov/>, accessed October 22, 2014; FY 2016: U.S. Department of the Treasury, *USASpending.gov*, <https://www.usaspending.gov/>, accessed November 16, 2017. **Loan guarantee programs credit subsidy:** Computed from data from U.S. Department of Energy, Loan Program Office, <https://www.energy.gov/lpo/portfolio/portfolio-projects>, accessed January 20, 2015 and EIA, *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2010*, July 2011, Table 29.

⁴ Section 1703 of Title XVII of the Energy Policy Act of 2005 authorizes the U.S. Department of Energy to support innovative clean energy technologies that are typically unable to obtain conventional private financing due to high technology risks. In addition, the technologies must avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases. The *Advanced Technology Vehicles Manufacturing (ATVM)* Loan Program was established in Section 136 of the Energy Independence and Security Act of 2007 to support the production of fuel-efficient, advanced technology vehicles and qualifying components in the United States. American Recovery and Reinvestment Act of 2009 amended Loan Guarantee Program's authorizing legislation, creating Section 1705.

Key findings

Table 3 and Table 4 summarize the allocation of federal direct financial interventions in U.S. energy markets by subsidy type. Several key findings stand out.

The scope and complexity of federal financial and award activities are very large and spread over a wide range of sources, recipients, and time frames. Despite a recent trend of decreasing federal activity, hundreds of distinct energy-related federal financial programs continue to pursue a wide range of goals using various methods. The time frames of these programs and activities can be very different, as in the case of tax provisions that allow taxpayers to decide which year to take a credit or to pay a deferred charge. Isolating the impacts of these programs, as well as characterizing the net impact of the whole set of actions on the U.S. energy system, is challenging.

Most current federal subsidies support developing renewable energy supplies (primarily biofuels, wind, and solar) and reducing energy consumption through energy efficiency. In FY 2016, nearly half (45%) of federal energy subsidies were associated with renewable energy, and 42% were associated with energy end uses. Table 4 shows a more detailed distribution of renewable energy-related federal support. The amount and distribution of renewable energy subsidies over time (see text box on *renewable-related subsidy trends*) have depended on congressional authorizations and the market competitiveness of renewable electricity technologies. Among renewable technologies, biofuels received the only incremental increase in FY 2016 subsidy support, driven by greater domestic biomass-based diesel production and foreign imports of these products that resulted in an approximately \$1 billion increase in tax credits from FY 2013 levels.

Energy end-use and conservation subsidies decreased from \$7.7 billion in FY 2013 to \$7.2 billion in FY 2016 (Table 3). The largest program in this combined category—the Low Income Home Energy Assistance Program (LIHEAP) operated through the U.S. Department of Health and Human Services (HHS)—maintained its funding levels at \$3.2 billion and \$3.4 billion in FY 2013 and FY 2016, respectively. The decrease in total subsidies and support for energy-related conservation and end-use programs between FY 2013 and FY 2016 was led by declines in direct expenditures, which decreased from \$4.2 billion to \$3.6 billion, respectively. Of the \$438 million decline in total federal support of conservation and end-use programs between FY 2013 and FY 2016, direct expenditures decreased \$597 million. The tax credit for energy efficiency improvements to existing homes (26 U.S.C. 25C) accounted for \$106 million of the decrease, and conversely, many tax expenditures (e.g., the credit for residential energy efficient property, 26 U.S.C. 25D) increased during the same period.

Since FY 2010, the scale of federal support has decreased as temporary measures expired, even as the U.S. energy system continues to grow. Federal activities within the scope of this study have been decreasing, in large part because of the expiration of provisions and programs authorized by the American Recovery and Reinvestment Act (ARRA or the Recovery Act) of 2009 (Figure 1). The Recovery Act provided energy funding that greatly increased DOE's previous energy program budgets but also required the rapid obligation of funds that would cover outlays over several years. The U.S. energy system, as a whole, continues to grow, with production activities growing more rapidly than energy consumption. As a result, the relative scale of federal activity within the overall context of the energy system has continued to decline since FY 2010.

Table 3. Quantified energy-specific subsidies and support by type, FY 2010, FY 2013, and FY 2016

million 2016 dollars, unless otherwise specified

Year and Support Type	Coal	Refined Coal	Natural Gas and Petroleum Liquids	Nuclear	Renewables	Electricity - Smart Grid and Transmission	Conservation	End Use	Total	Share of Total Subsidies and Support
2010										
Direct Expenditures	48	-	83	69	5,732	4	3,226	6,264	15,427	41%
Tax Expenditures	506	187	2,883	999	8,913	63	3,511	1,055	18,119	48%
Research and Development	320	-	10	177	844	566	704	97	2,718	7%
DOE Loan Guarantee Program	-	-	-	292	296	22	4	1,113	1,728	5%
Total	875	187	2,976	1,537	15,785	655	7,446	8,530	37,992	100%
Share of Total	2%	0%	8%	4%	42%	2%	20%	22%	100%	
2013										
Direct Expenditures	77	-	388	38	8,716	9	872	3,349	13,450	46%
Tax Expenditures	801	10	2,345	1,155	5,683	219	657	2,081	12,951	44%
Research and Development	216	-	64	197	864	887	517	189	2,934	10%
DOE Loan Guarantee Program	-	-	-	-	-	-	-	-	-	-
Total	1,094	10	2,796	1,390	15,264	1,115	2,046	5,619	29,335	100%
Share of Total	4%	0%	10%	5%	52%	4%	7%	19%	100%	
2016										
Direct Expenditures	19	-	111	40	909	11	234	3,391	4,716	31%
Tax Expenditures	906	-	(940)	160	5,316	160	560	2,653	8,816	59%
Research and Development	337	-	56	164	456	49	189	200	1,451	10%
DOE Loan Guarantee Program	-	-	-	-	-	-	-	-	-	-
Total	1,262	-	(773)	365	6,682	220	983	6,244	14,983	100%
Share of Total	8%	-	(5%)	2%	45%	1%	7%	42%	100%	

Notes: Totals may not equal sum of components due to independent rounding. Zero denotes rounding to zero value and a "-" symbol denotes a zero value. Energy-specific tax expenditures associated with renewables were allocated based on preliminary generation data. No hydropower generation was assumed to be eligible for production tax credits (PTC). It was assumed all investment tax credits were claimed by solar power plants. Municipal Solid Waste (MSW) and open-loop biomass generation estimates used to calculate PTCs were halved to represent the value of their PTC credit, relative to geothermal and wind. Generation estimates for 2016 were used to calculate credits associated with the PTC for wind plants that came online in 2006 and later.

Sources: **Tax expenditure estimates:** Office of Management and Budget, *Analytical Perspectives, Budget of the U.S. Government, Fiscal Years 2012, 2015 and 2018*. Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020*, JCX-3-17 (Washington, DC, January 2017), Table 1, *Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014*, JCS-3-10 (Washington, DC, December 2010), Table 1. **Federal direct expenditure and R&D expenditure subsidies:** DOE: U.S. Department of Energy, Office of the Chief Financial Officer, *Base Financial Data*, FY 2010, FY 2013, and FY 2016; FYs 2010 and 2013: U.S. General Services Administration, *USASpending.gov - Government spending at your fingertips*, <http://www.usaspending.gov/>, accessed October 22, 2014; FY 2016: U.S. Department of the Treasury, *USASpending.gov*, <http://www.usaspending.gov/>, accessed November 16, 2017. **Loan guarantee programs credit subsidy:** Computed from data from U.S. Department of Energy, Loan Program Office, <https://www.energy.gov/lpo/portfolio-projects>, accessed January 20, 2015 and EIA, *Direct Federal Financial Interventions and Subsidies in Fiscal Year 2010*, Table 29.

Table 4. Quantified renewable-related energy-specific subsidies and support by type, FY 2010, FY 2013, and FY 2016

million 2016 dollars, unless otherwise specified

Year and Support Type	Renewable Electric						Subtotal		Share of	
	Biomass	Geothermal	Hydroelectric	Solar	Wind	Other	Renewable Electric	Biofuels	Total Renewables	Total Renewables Subsidies
2010										
Direct Expenditures	185	67	63	481	4,241	330	5,369	363	5,732	36%
Tax Expenditures	575	1	19	132	1,297	-	2,023	6,890	8,913	56%
Research and Development	277	1	13	313	74	79	757	86	844	5%
DOE Loan Guarantee Program	-	13	-	190	94	-	297	-	296	2%
Total	1,037	83	95	1,116	5,705	410	8,445	7,340	15,785	100%
Share of Total Renewables	7%	1%	1%	7%	36%	3%	54%	46%	100%	
2013										
Direct Expenditures	346	325	205	3,094	4,454	218	8,642	75	8,716	57%
Tax Expenditures	48	32	18	2,164	1,682	-	3,944	1,740	5,683	37%
Research and Development	178	1	10	499	51	63	802	62	864	6%
DOE Loan Guarantee Program	-	-	-	-	-	-	-	-	-	-
Total	572	358	233	5,756	6,187	280	13,387	1,878	15,264	100%
Share of Total Renewables	4%	2%	2%	38%	41%	2%	88%	12%	100%	
2016										
Direct Expenditures	18	41	2	771	4	41	877	33	909	14%
Tax Expenditures	34	34	34	1,251	1,239	34	2,626	2,690	5,316	80%
Research and Development	27	10	2	209	24	95	367	90	456	7%
DOE Loan Guarantee Program	-	-	-	-	-	-	-	-	-	-
Total	79	86	38	2,231	1,266	169	3,859	2,813	6,682	100%
Share of Total Renewables	1%	1%	1%	33%	19%	3%	58%	42%	100%	

Notes: Totals may not equal sum of components due to independent rounding. Zero denotes rounding to zero value and a "-" symbol denotes a zero value. Energy-specific tax expenditures associated with renewables were allocated based on preliminary generation data. No hydropower generation was assumed to be eligible for production tax credits (PTC). It was assumed all investment tax credits were claimed by solar power plants. Municipal Solid Waste (MSW) and open-loop biomass generation estimates used

to calculate PTCs were halved to represent the value of their PTC credit, relative to geothermal and wind. Generation estimates for 2016 were used to calculate credits associated with the PTC captured wind plants that came online in 2006 and later.

Sources: **Tax expenditure estimates:** Office of Management and Budget, *Analytical Perspectives, Budget of the U.S. Government*, Fiscal Years 2012, 2015 and 2018. Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020*, JCS-3-17 (Washington, DC, January 2017), Table 1, *Estimates of Federal Tax Expenditures for Fiscal Years 2012-2017*, JCS-1-13 (Washington, DC, February 2013), Table 1, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014*, JCS-3-10 (Washington, DC, December 2010), Table 1, and, computed from data from U.S. Energy Information Administration (EIA), Form EIA-923, "Annual Electric Utility Data". **Federal direct expenditure and R&D expenditure subsidies:** U.S. General Services Administration, *USASpending.gov* - Government spending at your fingertips, <http://www.usaspending.gov/>, accessed October 22, 2014 and U.S. Department of the Treasury, *USASpending.gov*, accessed November 16, 2017. **Loan guarantee programs credit subsidy:** Computed from data from U.S. Department of Energy, Loan Program Office, <http://energy.gov/eo/loan-programs-office>, accessed January 20, 2015 and EIA, *Direct Federal Financial Interventions and Subsidies in Fiscal Years 2010*, July 2011, Table 29.

附件十一

《美国化石燃料补贴自述报告》

**(United States Self-Review of Fossil Fuel Subsidies
Submitted December 2015 to the G-20 Peer Reviewers)**

**United States Self-Review of Fossil Fuel Subsidies
Submitted December 2015 to the G-20 Peer Reviewers**

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Part 1: Producer Subsidies

There are a number of provisions, described below, available in the United States to producers of fossil fuels. In total, the United States government has identified sixteen Federal fossil fuel production tax provisions, as shown below. This list includes eleven Federal tax provisions previously identified in the United States' progress reports to the G-20, and 5 additional provisions identified during the United States' self-review for the United States - China G-20 peer review process.

1. Expensing of Intangible Drilling Costs

Annual Cost: \$1,629 million¹ (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas

Description of Subsidy: Taxpayers may elect to deduct intangible drilling costs (IDCs) in the year the cost is paid or incurred with respect to the development of an oil or natural gas property located in the United States. For an integrated oil company that has elected to expense IDCs, 30 percent of the IDCs on productive wells must be capitalized and amortized over a 60-month period.

Analysis of Subsidy: The expensing, rather than capitalization, of IDCs provides a tax preference to the oil and natural gas industry. Requiring capitalization of IDCs would place the oil and natural gas industry on a cost recovery system similar to that employed by other industries and reduce economic distortions. This provision, like other oil and natural gas preferences the Administration proposes to repeal, distorts markets by encouraging more investment in the oil and natural gas industry than would occur under a neutral tax system. This market distortion is detrimental to long-term energy security and is also inconsistent with the Administration's policy of supporting a clean energy economy, reducing our reliance on oil, and cutting greenhouse gas emissions. Moreover, the tax subsidy for oil and natural gas must ultimately be financed with taxes that result in underinvestment in other, potentially more productive, areas of the economy.

Proposal for Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal expensing of intangible drilling costs and 60-month amortization of capitalized intangible drilling costs. Intangible drilling costs would be capitalized as depreciable or depletable property, depending on the nature of the cost incurred, in accordance with the generally

¹ For all items (except for publicly traded partnerships) for which the United States Treasury is the responsible agency, the Treasury calculates the annual cost by projecting the average annual difference in Federal tax revenues between current law and the proposed revision over fiscal years 2016 through 2025, assuming the subsidy is removed effective after 31 December 2015. For publicly traded partnerships, the projection is based on the assumption that the change in tax treatment is effective after 31 December 2020, and the annual cost measures the average annual difference in Federal tax revenues over fiscal years 2021 through 2025.

applicable rules. The proposal would be effective for costs paid or incurred after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

2. Percentage Depletion for Oil and Natural Gas Wells

Annual Cost: \$966 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas

Description of Subsidy: Depletion is available to any person having an economic interest in a producing oil and natural gas property. There are generally two types of depletion – cost and percentage depletion. Cost depletion is limited to the taxpayer's basis in the property, whereas percentage depletion is not limited by the basis, but is subject to other limitations.

Percentage depletion for producing oil and natural gas property (15 percent rate) is available only to independent producers and royalty owners and is limited to average production of 1,000 barrels of oil per day or its natural gas equivalent. The percentage depletion deduction is further generally limited to the lesser of 65 percent of the taxable income before the depletion allowance or 100 percent of the taxable income from the property before the depletion allowance.

Analysis of Subsidy: Percentage depletion effectively provides a lower rate of tax with respect to a favored source of income relative to cost depletion. Cost depletion computed by reference to the taxpayer's basis in the property would place oil and natural gas producers on a cost recovery system similar to that employed by other industries and reduce economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal for Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal percentage depletion with respect to oil and natural gas wells. Taxpayers would be permitted to claim cost depletion on their adjusted basis, if any, in oil and natural gas wells. The proposal would be effective for taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

3. Domestic Manufacturing Deduction for Fossil Fuels

Annual Cost: \$1,049 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas, coal, lignite, oil shale

Description of Subsidy: A deduction is allowed with respect to income attributable to domestic manufacturing and production activities. For taxable years beginning after 2009, the manufacturing deduction is generally equal to nine percent of the lesser of qualified production activities income for the taxable year or taxable income for the taxable year, limited to 50 percent of the W-2 wages of the taxpayer for the taxable year. The deduction for income from oil and natural gas production activities is computed at a six-percent rate.

This deduction is widely available and not targeted at fossil fuel industries.

Analysis of Subsidy: The manufacturing deduction, which is available to all taxpayers that generate qualified production activities income, effectively provides a lower rate of tax for income from certain activities, including the production of fossil fuels. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would exclude from the definition of domestic production all gross receipts derived from the sale, exchange or other disposition of oil, natural gas or a primary product thereof and of coal, other hard mineral fossil fuels, or a primary product thereof for taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

4. Two Year Amortization Period for Geological & Geophysical Expenditures

Annual Cost: \$288 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas

Description of Subsidy: Geological and geophysical expenditures incurred by independent producers in connection with domestic oil and natural gas exploration may be amortized over two years. For integrated oil companies, these costs must be amortized over seven years.

Analysis of Subsidy: The accelerated amortization of geological and geophysical expenditures incurred by independent producers provides a tax preference to the oil and natural gas industry. Increasing the amortization period for geological and geophysical expenditures incurred by

independent oil and natural gas producers from two years to seven years would provide a more accurate reflection of their income and more consistent tax treatment for all oil and natural gas producers. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would increase the amortization period from two to seven years for geological and geophysical expenditures incurred by independent producers in connection with all oil and natural gas exploration in the United States. Seven year amortization would apply even if the property is abandoned, and any remaining basis of the abandoned property would be recovered over the remainder of the seven year period. The proposal would be effective for amounts paid or incurred after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

5. Percentage Depletion for Hard Mineral Fossil Fuels

Annual Cost: \$209 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Coal, lignite, oil shale

Description of Subsidy: Percentage depletion is available for coal and lignite (10 percent rate) and oil shale (15 percent rate). The percentage depletion deduction is generally subject to the alternative minimum tax at a 20 percent rate to the extent it exceeds the adjusted basis of the property. The deduction may not exceed 50 percent of the net income from the mineral property in any year.

Analysis of Subsidy: Percentage depletion, rather than cost depletion, effectively provides a lower rate of tax with respect to a favored source of income. Cost depletion computed by reference to the taxpayer's basis in the property would place these fossil fuel industries on a cost recovery system similar to that employed by other industries and reduce economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal percentage depletion with respect to coal and other hard mineral fossil fuels. The other hard mineral fossil fuels for which no percentage depletion would be allowed include lignite and oil shale. Taxpayers would be permitted to claim cost depletion on their adjusted basis, if any, in coal and other hard mineral fossil fuel properties. The proposal would be effective for taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

6. Expensing of Exploration and Development Costs for Hard Mineral Fuels

Annual Cost: \$53 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Coal, lignite, oil shale

Description of Subsidy: Mining companies may elect to deduct 70 percent of domestic exploration and development costs. The 30 percent of expenses that cannot be deducted must be capitalized and amortized over a 60-month period. Taxpayers may also elect to capitalize mine exploration and development expenses and amortize them over a 10-year period. If this election is made, the expenses will not be tax preference items under the alternative minimum tax.

Analysis of Subsidy: The expensing of exploration and development costs relating to coal and other hard mineral fossil fuels provides a tax preference to these fossil fuel industries. Capitalization of exploration and development costs relating to coal and other hard mineral fossil fuels would place taxpayers in that industry on a cost recovery system similar to that employed by other industries and reduce economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal expensing, 60-month amortization, and 10 year amortization of exploration and development costs relating to coal and other hard mineral fossil fuels. The costs would be capitalized as depreciable or depletable property, depending on the nature of the cost incurred, in accordance with generally applicable rules. The other hard mineral fossil fuels for which expensing, 60 month amortization, and 10 year amortization would not be allowed include lignite and oil shale. The proposal would be effective for costs paid or incurred after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

7. Capital Gains Treatment for Royalties of Coal

Annual Cost: \$31 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Coal, lignite

Description of Subsidy: Royalties received on the disposition of coal generally qualify for treatment as long-term capital gains. This treatment does not apply unless the taxpayer has been the owner of the mineral in place for at least one year before it is mined. The treatment also does not apply to income realized as a co-adventurer, partner, or principal in the mining of the mineral or to certain related party transactions.

Analysis of Subsidy: The capital gains treatment of coal and lignite royalties provides a tax preference to these fossil fuel industries. Treating royalties as ordinary income would place taxpayers in that industry on a cost recovery system similar to that employed by other industries and reduce economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal capital gains treatment of coal and lignite royalties and would tax those royalties as ordinary income for amounts realized in taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

8. Deduction for Tertiary Injectants

Annual Cost: \$10 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil

Description of Subsidy: Taxpayers engaged in petroleum extraction activities may generally deduct qualified tertiary injectant expenses incurred while applying a tertiary recovery method to increase the recovery of crude oil.

Analysis of Subsidy: The deduction, rather than capitalization, of tertiary injectants provides a tax preference to the oil and natural gas industries. Capitalization of tertiary injectants would place the oil and natural gas industry on a cost recovery system similar to that employed by other industries and reduces economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal the deduction for qualified tertiary injectant expenses for amounts paid or incurred after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

9. Exception to Passive Loss Limitation for Working Interests in Oil and Natural Gas Properties

Annual Cost: \$19 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas

Description of Subsidy: Under normal rules, passive losses that remain after being netted against passive income generally can only be carried forward to offset passive income in future years. The exception permits losses from working interests in oil and gas properties to offset active income. The exception is only available if the working interest is owned in a way that does not limit the taxpayer's liability.

Analysis of Subsidy: The special tax treatment of working interests in oil and natural gas properties provides a tax preference to the oil and natural gas industries. Eliminating the working interest exception would subject oil and natural gas properties to the same limitations as other activities and reduce economic distortions. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal the exception from the passive loss rules for working interests in oil and natural gas properties for taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

10. Enhanced Oil Recovery (EOR) Credit

Annual Cost: \$0 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil

Description of Subsidy: A 15 percent credit is provided for expenses associated with an EOR project in the United States. An EOR project is a project that involves the use of one or more tertiary recovery methods to significantly increase the amount of recoverable crude oil.

The credit is phased out when the reference price of oil exceeds a statutory amount indexed to inflation.

Analysis of Subsidy: The credit provides a tax preference to the oil and natural gas industries. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal the tax credit for enhanced oil recovery projects beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

11. Marginal Wells Credit

Annual Cost: \$0 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, natural gas

Description of Subsidy: A production tax credit is provided for marginal wells or wells that have an average daily production of not more than 3 barrels per day.

The credit is phased out when the reference price of oil or gas exceeds a statutory amount indexed to inflation.

Analysis of Subsidy: The credit provides a tax preference to the oil and natural gas industries. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal the production tax credit for oil and natural gas from marginal wells for production in taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

12. Corporate Income Tax Exemption for Fossil Fuel Publicly Traded Partnerships

Annual Cost: \$342 million (FY2016 Mid-Session Review)

Fossil Fuel Targeted: Oil, gas, coal

Description of Subsidy: Publicly traded partnerships are generally subject to the corporate income tax. Partnerships that derive at least 90 percent of their gross income from depletable natural resources, real estate, or commodities are exempt from the corporate income tax. Instead they are taxed as partnerships. They pass through all income, gains, losses, deductions, and credits to their partners, with the partners then being liable for income tax (or benefitting from the losses) on their distributive shares.

Analysis of Subsidy: The credit provides a tax preference to the oil and natural gas industries. See expensing of intangible drilling costs for further analysis of the effects of fossil fuel tax preferences.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would repeal the exemption from the corporate income tax for publicly traded partnerships with qualifying income and gains from activities relating to fossil fuels. Such publicly traded partnerships would be taxed as C corporations for taxable years beginning after December 31, 2020.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

13. Excise Tax Exemption for Crude Oil derived from Tar Sands

Annual cost: \$52 million (FY2016 Budget)

Fossil Fuel Targeted: Crude oil derived from bitumen and kerogen-rich rock (tar sands)

Description of subsidy: An excise tax is imposed on: (1) crude oil received at a U.S. refinery; (2) imported petroleum products (including crude oil) entered into the United States for consumption, use, or warehousing; and (3) any domestically produced crude oil that is used (other than on the premises where produced for extracting oil or natural gas) in or exported from the United States if, before such use or exportation, no taxes were imposed on the crude oil. The tax is eight cents per barrel for periods before January 1, 2017, and nine cents per barrel for periods after December 31, 2016. Crudes such as those that are produced from bituminous deposits as well as kerogen-rich rock are not treated as crude oil or petroleum products for purposes of the tax. The tax is deposited in the Oil Spill Liability Trust Fund to pay costs associated with oil removal and damages resulting from oil spills, as well as to provide annual funding to certain agencies for a wide range of oil pollution prevention and response programs, including research and development.

Analysis of Subsidy: The credit provides a tax preference to crude oil derived from tar sands.

Proposal of Elimination: The Administration's Fiscal Year 2016 Budget proposal would extend the excise tax to crudes such as those produced from bituminous deposits as well as kerogen-rich rock for taxable years beginning after December 31, 2015.

Implementation of Elimination: The United States Congress must pass enabling legislation for this proposal to become law.

Responsible Agency: United States Department of the Treasury.

14. Royalty-Exempt Beneficial Use of Fuels

Annual cost: \$39 million estimated annual average lost royalty value.²

Fossil Fuel Targeted: Primarily gas, potentially also oil

Description of subsidy: Onshore and offshore oil and gas companies may use hydrocarbons for "beneficial purposes" on the lease without paying Federal royalties. These purposes include use as fuel for drilling rig engines, enhanced recovery, and for lifting, heating, or compressing oil and natural gas.

Analysis of Subsidy: The United States public foregoes royalty payments on beneficial use volumes.

Proposal of Elimination: The Bureau of Land Management (BLM) is preparing a Proposed Rule to update the permitting of beneficial use of oil and gas at onshore facilities; this rule is expected to result in beneficial use being applied in fewer situations. Similar updates could be developed for offshore facilities.

Implementation of Elimination: The proposed rule is anticipated to be published in early 2016, with the final rule scheduled for publication in May 2016. The rulemaking is a high priority for BLM.

Responsible Agency: United States Department of the Interior.

15. Royalty-Free Flaring and Venting of Natural Gas

Annual cost: \$70 million estimated annual average lost royalty value.

² The estimates for Royalty-Exempt Beneficial Use of Fuels and Royalty-Free Flaring and Venting of Natural Gas were calculated by multiplying natural gas data from ONRR (gas consumed for beneficial purposes or approved by BLM or BSEE to be flared or vented as unavoidably lost) by an average royalty paid per thousand cubic feet (mcf) of gas extracted in individual states for each sales year over 2006-13. The average annual royalty paid per mcf was calculated using ONRR's sales volume and royalties paid data on their statistical website. If royalties were charged on these volumes operators of oil and gas wells would have an incentive to reduce the volumes vented and/or flared and, therefore, the values presented here are upper-bound estimates.

Fossil Fuel Targeted: Gas

Description of subsidy: For onshore Federal oil and gas extraction activities, oil and gas companies may vent (release to the atmosphere) or flare (burn) natural gas under a variety of situations, including tests, emergencies, and when it is uneconomical to get the gas to market (for instance due to a lack of infrastructure for storage and transport). Oil and gas companies do not pay Federal royalties on gas that is legally vented or flared. Absent emergencies or special operational considerations, in concept, all natural gas extracted should bear royalties regardless of whether it is sold or vented/flared. For offshore Federal oil and gas extraction activities, the Bureau of Safety and Environmental Enforcement (BSEE) regulations already require that facilities processing more than an average of 2,000 barrels of oil per day must install flare/vent meters. BSEE regulations also require that requests to approve flaring or venting cannot be justified on the basis of the avoidance of lost revenue (i.e. there is no allowance of offshore venting/flaring based on economic grounds).

Analysis of Subsidy: The United States public foregoes royalty payments on vented and flared volumes.

Proposal of Elimination: BLM is preparing a Proposed Rule addressing venting and flaring to establish standards to limit the waste of vented and flared on-shore gas, to minimize the amount of venting and flaring that takes place on oil and gas production facilities on Federal and Indian lands, and to establish standards for determining avoidable versus unavoidable losses.

Implementation of Elimination: The proposed rule is anticipated to be published in early 2016, with the final rule scheduled for publication in May 2016. The rulemaking is a high priority for BLM.

Responsible Agency: United States Department of the Interior.

16. Liability Cap on Natural Resource Damages

Annual cost: Not estimated. To-date there have been no spills for which the liability cap provision has lowered a responsible party's liability for a specific spill.

Fossil Fuel Targeted: Primarily oil, potentially also gas

Description of subsidy: The Oil Pollution Act of 1990 (OPA) requires responsible parties to pay oil-spill cleanup costs, with a \$75-million cap on payouts for private economic and public natural-resource claims (exceptions to the cap include gross negligence). To-date no spill apart from the Deepwater Horizon has had damages large enough to exceed the cap, so this provision has not been invoked. In the case of Deepwater Horizon, the courts made a finding of gross negligence on the part of the operator. One of the provisions of the cap is that it shall not apply for damages caused by gross negligence. So even in the case of Deepwater Horizon, the cap did not apply.

Analysis of Subsidy: Damages attributable to an oil company in excess of the cap would be borne by the United States public.

Proposal of Elimination: The liability cap is set by statute and may only be adjusted to address significant increases in the Consumer Price Index (CPI). The Bureau of Ocean Energy Management (BOEM) is authorized to increase the cap to keep pace with inflation. In the future, BOEM will adjust the cap every three years to account for inflation.

Implementation of Elimination: On December 11, 2014, the Bureau of Ocean Energy Management (BOEM) administratively increased the limit of liability for oil-spill related damages from \$75 million to approximately \$134 million for offshore oil and gas facilities. This increase is consistent with recommendations to increase the liability cap from the National Commission on the BP Deepwater Horizon Oil Spill and other studies, and represents the maximum increase allowable under the Oil Pollution Act of 1990. The increase applies to facilities handling oil and gas in Federal and State waters seaward of the coastline. The rule also contains a mechanism to regularly update the limit of liability cap in the future to reflect changes in inflation over time based on the CPI.

Responsible Agency: United States Department of the Interior.

Part 2: Consumer Subsidies

There is one consumption subsidy that is funded by the Federal government in the United States. It is targeted at low-income households, and benefits are typically dispersed as a lump sum credit on a household's utility bill. Because the program is a targeted transfer that helps low-income households obtain essential energy services and does not encourage wasteful consumption, this program is not considered inefficient.

1. Low-Income Home Energy Assistance Program (LIHEAP)

Annual Cost: \$3,400 million in fiscal year 2016

Description of Subsidy: A discretionary block grant awarded to States, territories, and tribes and tribal organizations to provide home heating and cooling energy assistance to low-income households. Grantees may use a portion of their LIHEAP funds for low-cost residential weatherization services and for program administration. Federal guidelines limit eligibility to households with incomes up to 150% of poverty or 60% of State median income. In FY 2012, the average LIHEAP heating benefit (heating and winter crisis benefits combined) was \$587 representing 63.7% of average home heating expenditures for LIHEAP households.

Analysis of Subsidy: LIHEAP assistance is targeted to vulnerable households (those with elderly, disabled or young children) and to the poorest (those with the highest energy burdens relative to their income). These households are targeted as they may face serious health and safety risks if they do not have adequate heating and cooling in their homes. In FY 2012, 32% of LIHEAP households that received heating assistance had an elderly member, 35% included a disabled member, and 21% had a child under 5 years old. The weighted average energy burden among LIHEAP heating recipient households was 12%, compared to 9% among all low-income households.

Leveraged resources: LIHEAP grants to state, tribes, and territories also leverages other energy related resources, such as discounted utility rates, weatherization assistance, telephone discounts, and other private and public resources. During Fiscal Year 2010, these grantees leveraged a total of \$2.996 billion from their private and public partners.

Proposal for Elimination: Authorization for this program expired at the end of 2007, but Congress has continued to provide annual appropriations. The Administration does not propose eliminating this program, which is targeted to low-income households.

Responsible Agency: United States Department of Health and Human Services (HHS).

附件十二

美国国会《2019 财年美国政府预算分析》

FISCAL YEAR 2021

A BUDGET FOR

AMERICA'S FUTURE

ANALYTICAL PERSPECTIVES



BUDGET OF THE U.S. GOVERNMENT

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THE BUDGET DOCUMENTS

Budget of the United States Government, Fiscal Year 2021 contains the Budget Message of the President, information on the President's priorities, and summary tables.

Analytical Perspectives, Budget of the United States Government, Fiscal Year 2021 contains analyses that are designed to highlight specified subject areas or provide other significant presentations of budget data that place the budget in perspective. This volume includes economic and accounting analyses, information on Federal receipts and collections, analyses of Federal spending, information on Federal borrowing and debt, baseline or current services estimates, and other technical presentations.

Supplemental tables and other materials that are part of the *Analytical Perspectives* volume are available at <https://www.whitehouse.gov/omb/analytical-perspectives/>.

Appendix, Budget of the United States Government, Fiscal Year 2021 contains detailed information on the various appropriations and funds that constitute the budget and is designed primarily for the use of the Appropriations Committees. The *Appendix* contains more detailed financial information on individual programs and appropriation accounts than any of the other budget documents. It includes for each agency: the proposed text of appropriations language; budget schedules for each account; legislative proposals; narrative explanations of each budget account; and proposed general

provisions applicable to the appropriations of entire agencies or group of agencies. Information is also provided on certain activities whose transactions are not part of the budget totals.

Major Savings and Reforms, Fiscal Year 2021, which accompanies the President's Budget, contains detailed information on major savings and reform proposals. The volume describes both major discretionary program eliminations and reductions and mandatory savings proposals.

BUDGET INFORMATION AVAILABLE ONLINE

The President's Budget and supporting materials are available online at <https://www.whitehouse.gov/omb/budget/>. This link includes electronic versions of all the budget volumes, supplemental materials that are part of the *Analytical Perspectives* volume, spreadsheets of many of the budget tables, and a public use budget database. This link also includes *Historical Tables* that provide data on budget receipts, outlays, surpluses or deficits, Federal debt, and Federal employment over an extended time period, generally from 1940 or earlier to 2021 or 2025. Also available are links to documents and materials from budgets of prior years.

For more information on access to electronic versions of the budget documents, call (202) 512-1530 in the D.C. area or toll-free (888) 293-6498. To purchase the printed documents call (202) 512-1800.

GENERAL NOTES

1. All years referenced for budget data are fiscal years unless otherwise noted. All years referenced for economic data are calendar years unless otherwise noted.
2. At the time the Budget was prepared, the United States-Mexico-Canada Agreement Implementation Act (Public Law 116-113) had not yet been signed into law. As a result, the Budget includes a Government-wide allowance to represent the discretionary appropriations included in this proposal, which the Administration transmitted to the Congress on December 13, 2019, the House passed on December 19, 2019, and the Senate passed on January 16, 2020.
3. Detail in this document may not add to the totals due to rounding.

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TABLE 13-1. ESTIMATES OF TOTAL INCOME TAX EXPENDITURES FOR FISCAL YEARS 2019-2029
(In millions of dollars)

	Total from corporations and individuals											
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2020-29
National Defense												
1 Exclusion of benefits and allowances to Armed Forces personnel	12,460	12,910	11,660	11,700	12,080	12,560	13,090	13,660	14,270	14,910	15,600	132,440
International affairs:												
2 Exclusion of income earned abroad by U.S. citizens ...	6,930	7,280	7,640	8,020	8,420	8,840	9,290	9,750	10,240	10,750	11,290	91,520
3 Exclusion of certain allowances for Federal employees abroad	240	250	260	280	290	300	320	330	350	370	390	3,140
4 Inventory property sales source rules exception	0	0	0	0	0	0	0	0	0	0	0	0
5 Reduced tax rate on active income of controlled foreign corporations (normal tax method)	35,470	40,000	42,980	44,660	35,220	21,760	10,720	46,840	75,840	79,250	82,810	480,080
6 Deduction for foreign-derived intangible income derived from trade or business within the United States	7,530	8,100	9,880	11,150	11,610	12,130	12,670	9,240	7,000	7,340	7,700	96,820
7 Interest Charge Domestic International Sales Corporations (IC-DISCs)	1,280	1,340	1,410	1,480	1,560	1,630	1,720	1,800	1,890	1,990	2,090	16,910
General science, space, and technology:												
8 Expensing of research and experimentation expenditures (normal tax method)	5,520	5,740	6,330	-19,090	-34,990	-25,630	-15,640	-4,940	0	0	0	-88,220
9 Credit for increasing research activities	15,300	16,810	18,380	19,890	21,370	22,900	24,450	26,040	27,650	29,310	31,030	237,830
Energy:												
10 Expensing of exploration and development costs, fuels ...	930	1,060	890	630	500	510	600	740	790	730	640	7,090
11 Excess of percentage over cost depletion, fuels	670	760	820	870	920	980	1,050	1,180	1,280	1,350	1,400	10,610
12 Exception from passive loss limitation for working interests in oil and gas properties	10	10	10	10	10	10	10	10	10	10	10	100
13 Capital gains treatment of royalties on coal	150	140	140	140	140	150	160	170	190	200	210	1,640
14 Exclusion of interest on energy facility bonds	10	10	10	10	10	10	10	10	10	10	10	100
15 Enhanced oil recovery credit	510	440	320	270	330	430	560	650	650	630	630	4,910
16 Energy production credit ¹	4,230	4,310	4,290	4,250	4,200	4,070	3,920	3,290	2,590	1,760	1,070	33,750
17 Marginal wells credit	110	80	100	100	80	40	10	0	0	0	0	410
18 Energy investment credit ¹	3,710	4,510	4,820	4,490	3,700	2,690	2,010	1,540	1,220	1,020	920	26,920
19 Alcohol fuel credits ²	0	0	0	0	0	0	0	0	0	0	0	0
20 Bio-Diesel and small agri-biodiesel producer tax credits ³	0	0	0	0	0	0	0	0	0	0	0	0
21 Tax credits for clean-fuel burning vehicles and refueling property	940	580	380	380	380	310	220	200	200	190	140	2,980
22 Exclusion of utility conservation subsidies	450	470	490	510	540	570	590	620	650	680	710	5,830
23 Credit for holding clean renewable energy bonds ⁴	70	70	70	70	70	70	70	70	70	70	70	700
24 Credit for investment in clean coal facilities	20	10	20	40	80	100	90	80	90	50	50	610
25 Natural gas distribution pipelines treated as 15-year property	70	70	50	30	-10	-50	-80	-120	-140	-140	-140	-530
26 Amortize all geological and geophysical expenditures over 2 years	230	250	260	270	290	310	310	350	370	380	380	3,170
27 Allowance of deduction for certain energy efficient commercial building property	10	0	0	0	0	0	0	0	0	0	0	0
28 Credit for construction of new energy efficient homes ..	50	10	10	0	0	0	0	0	0	0	0	20
29 Credit for residential energy efficient property	1,980	1,740	1,410	360	70	0	0	0	0	0	0	3,580
30 Qualified energy conservation bonds ⁵	30	30	30	30	30	30	30	30	30	30	30	300
31 Advanced Energy Property Credit	10	10	10	10	10	10	10	10	10	10	10	100
32 Advanced nuclear power production credit	0	0	0	100	190	240	270	280	280	280	270	1,910
33 Reduced tax rate for nuclear decommissioning funds ..	100	100	110	110	120	120	130	130	140	150	150	1,260
Natural resources and environment:												
34 Expensing of exploration and development costs, nonfuel minerals	170	180	160	110	90	90	100	130	140	120	110	1,230
35 Excess of percentage over cost depletion, nonfuel minerals	120	130	140	160	160	170	190	210	220	240	240	1,860
36 Exclusion of interest on bonds for water, sewage, and hazardous waste facilities	300	320	310	320	340	340	350	380	380	390	390	3,520
37 Capital gains treatment of certain timber income	150	140	140	140	140	150	160	170	190	200	210	1,640

General Science, Space, and Technology

8. Expensing of research and experimentation expenditures (normal tax method).—The baseline tax system allows a deduction for the cost of producing income. It requires taxpayers to capitalize the costs associated with investments over time to better match the streams of income and associated costs. Research and experimentation (R&E) projects can be viewed as investments because, if successful, their benefits accrue for several years. It is often difficult, however, to identify whether a specific R&E project is successful and, if successful, what its expected life will be. Because of this ambiguity, the reference tax law baseline system would allow expensing of R&E expenditures. In contrast, under the normal tax method, the expensing of R&E expenditures is viewed as a tax expenditure. The baseline assumed for the normal tax method is that all R&E expenditures are successful and have an expected life of five years. Current law requires R&E expenditures paid or incurred in taxable years beginning after December 31, 2021, to be capitalized and amortized over 5 years, while allowing R&E expenditures paid or incurred in prior taxable years to be expensed.

9. Credit for increasing research activities.—The baseline tax system would uniformly tax all returns to investments and not allow credits for particular activities, investments, or industries. In contrast, the Tax Code allows an R&E credit of up to 20 percent of qualified research expenditures in excess of a base amount. The base amount of the credit is generally determined by multiplying a “fixed-base percentage” by the average amount of the company’s gross receipts for the prior four years. The taxpayer’s fixed base percentage generally is the ratio of its research expenses to gross receipts for 1984 through 1988. Taxpayers can elect the alternative simplified credit regime, which equals 14 percent of qualified research expenses that exceed 50 percent of the average qualified research expenses for the three preceding taxable years.

Energy

10. Expensing of exploration and development costs, fuels.—Under the baseline tax system, the costs of exploring and developing oil and gas wells and coal mines or other natural fuel deposits would be capitalized and then amortized (or depreciated) over an estimate of the economic life of the property. This insures that the net income from the well or mine is measured appropriately each year. In contrast to this treatment, current law allows immediate deduction, i.e., expensing, of intangible drilling costs for successful investments in domestic oil and gas wells (such as wages, the cost of using machinery for grading and drilling, and the cost of unsalvageable materials used in constructing wells). Current law also allows immediate deduction of eligible exploration and development costs for domestic coal mines and other natural fuel deposits. Because expensing allows recovery of costs sooner, it is more advantageous to the taxpayer than amortization. Expensing provisions for exploration expenditures apply only to properties for which a deduc-

tion for percentage depletion is allowable. For oil and gas wells, integrated oil companies may expense only 70 percent of intangible drilling costs and must amortize the remaining 30 percent over five years. Non-integrated oil companies may expense all such costs.

11. Excess of percentage over cost depletion, fuels.—The baseline tax system would allow recovery of the costs of developing certain oil, gas, and mineral fuel properties using cost depletion. Cost depletion is similar in concept to depreciation, in that the costs of developing or acquiring the asset are capitalized and then gradually reduced over an estimate of the asset’s economic life, as is appropriate for measuring net income. In contrast, the Tax Code generally allows independent fuel producers and royalty owners to take percentage depletion deductions rather than cost depletion on limited quantities of output. Under percentage depletion, taxpayers deduct a percentage of gross income from fossil fuel production. In certain cases the deduction is limited to a fraction of the asset’s net income. Over the life of an investment, percentage depletion deductions can exceed the cost of the investment. Consequently, percentage depletion may provide more advantageous tax treatment than would cost depletion, which limits deductions to an investment’s cost.

12. Exception from passive loss limitation for working interests in oil and gas properties.—The baseline tax system accepts current law’s general rule limiting taxpayers’ ability to deduct losses from passive activities against nonpassive income (e.g., wages, interest, and dividends). Passive activities generally are defined as those in which the taxpayer does not materially participate, and there are numerous additional considerations brought to bear on the determination of which activities are passive for a given taxpayer. Losses are limited in an attempt to limit tax sheltering activities. Passive losses that are unused may be carried forward and applied against future passive income. An exception from the passive loss limitation is provided for a working interest in an oil or gas property that the taxpayer holds directly or through an entity that does not limit the liability of the taxpayer with respect to the interest. Thus, taxpayers can deduct losses from such working interests against nonpassive income without regard to whether they materially participate in the activity.

13. Capital gains treatment of royalties on coal.—The baseline tax system generally would tax all income under the regular tax rate schedule. It would not allow preferentially low tax rates to apply to certain types or sources of income. For individuals, tax rates on regular income vary from 10 percent to 39.6 percent in the budget window (plus a 3.8 percent surtax on high income taxpayers), depending on the taxpayer’s income. In contrast, current law allows capital gains realized by individuals to be taxed at a preferentially low rate that is no higher than 20 percent (plus the 3.8 percent surtax). Certain sales of coal under royalty contracts qualify for taxation as capital gains rather than ordinary income, and so benefit from the preferentially low 20 percent maximum tax rate on capital gains.

14. Exclusion of interest on energy facility bonds.—The baseline tax system generally would tax all income under the regular tax rate schedule. It would not allow preferentially low (or zero) tax rates to apply to certain types or sources of income. In contrast, the Tax Code allows interest earned on State and local bonds used to finance construction of certain energy facilities to be exempt from tax. These bonds are generally subject to the State private-activity-bond annual volume cap.

15. Enhanced oil recovery credit.—A credit is provided equal to 15 percent of the taxpayer's costs for enhanced oil recovery on U.S. projects. The credit is reduced in proportion to the ratio of the reference price of oil for the previous calendar year minus \$28 (adjusted for inflation from 1990) to \$6.

16. Energy production credit.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. In contrast, the Tax Code provides a credit for certain electricity produced from wind energy, biomass, geothermal energy, solar energy, small irrigation power, municipal solid waste, or qualified hydropower and sold to an unrelated party. Wind facilities must have begun construction before January 1, 2020. Facilities that begin construction in 2017 receive 80 percent of the credit, facilities that begin construction in 2018 receive 60 percent of the credit, and facilities that begin construction in 2019 receive 40 percent of the credit. Qualified facilities producing electricity from sources other than wind must begin construction before January 1, 2018. In addition to the electricity production credit, an income tax credit is allowed for the production of refined coal for facilities placed in service before January 1, 2012. The Tax Code also provided an income tax credit for Indian coal facilities. The Indian coal facilities credit expired on December 31, 2017.

17. Marginal wells credit.—A credit is provided for crude oil and natural gas produced from a qualified marginal well. A marginal well is one that does not produce more than 1,095 barrel-of-oil equivalents per year, with this limit adjusted proportionately for the number of days the well is in production. The credit is no more than \$3.00 per barrel of qualified crude oil production and \$0.50 per thousand cubic feet of qualified natural gas production. The credit for natural gas is reduced in proportion to the amount by which the reference price of natural gas at the wellhead for the previous calendar year exceeds \$1.67 per thousand cubic feet and is zero for a reference price that exceeds \$2.00. The credit for crude oil is reduced in proportion to the amount by which the reference price of oil for the previous calendar year exceeds \$15.00 per barrel and is zero for a reference price that exceeds \$18.00. All dollar amounts are adjusted for inflation from 2004.

18. Energy investment credit.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. However, the Tax Code provides credits for investments in solar and geothermal energy property,

qualified fuel cell power plants, stationary microturbine power plants, geothermal heat pumps, small wind property and combined heat and power property. The credit is 30 percent for property that begins construction before 2020, 26 percent for property that begins construction in 2020, and 22 percent for property that begins construction in 2021 and in all cases that is placed in service before January 1, 2024. A 10 percent credit is available for geothermal or qualified solar property placed in service after December 31, 2023. Owners of renewable power facilities that qualify for the energy production credit may instead elect to take an energy investment credit at a rate specified by law.

19. Alcohol fuel credits.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. In contrast, the Tax Code provided an income tax credit for qualified cellulosic biofuel production which was renamed the Second Generation Biofuel Producer Tax Credit. This provision expired on December 31, 2017.

20. Bio-diesel and small agri-biodiesel producer tax credits.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. However, the Tax Code allowed an income tax credit for Bio-diesel and for Bio-diesel derived from virgin sources. In lieu of the Bio-diesel credit, the taxpayer could claim a refundable excise tax credit. In addition, small agri-biodiesel producers were eligible for a separate income tax credit for biodiesel production, and a separate credit was available for qualified renewable diesel fuel mixtures. This provision expired on December 31, 2017.

21. Tax credits for clean-fuel burning vehicles and refueling property.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. In contrast, the Tax Code allows credits for plug-in electric-drive motor vehicles, alternative fuel vehicle refueling property, two-wheeled plug-in electric vehicles, and fuel cell motor vehicles. These provisions, except for the plug-in electric-drive motor vehicle credit, expired after December 31, 2017.

22. Exclusion of utility conservation subsidies.—The baseline tax system generally takes a comprehensive view of taxable income that includes a wide variety of (measurable) accretions to wealth. In certain circumstances, public utilities offer rate subsidies to non-business customers who invest in energy conservation measures. These rate subsidies are equivalent to payments from the utility to its customer, and so represent accretions to wealth, income that would be taxable to the customer under the baseline tax system. In contrast, the Tax Code exempts these subsidies from the non-business customer's gross income.

23. Credit for holding clean renewable energy bonds.—The baseline tax system would uniformly tax all returns to investments and not allow credits for particu-

lar activities, investments, or industries. In contrast, the Tax Code provides for the issuance of Clean Renewable Energy Bonds that entitle the bond holder to a Federal income tax credit in lieu of interest. As of March 2010, issuers of the unused authorization of such bonds could opt to receive direct payment with the yield becoming fully taxable.

24. Credit for investment in clean coal facilities.—The baseline tax system would uniformly tax all returns to investments and not allow credits for particular activities, investments, or industries. In contrast, the Tax Code provides investment tax credits for clean coal facilities producing electricity and for industrial gasification combined cycle projects.

25. Natural gas distribution pipelines treated as 15-year property.—The baseline tax system allows taxpayers to deduct the decline in the economic value of an investment over its economic life. However, the Tax Code allows depreciation of natural gas distribution pipelines (placed in service between 2005 and 2011) over a 15 year period. These deductions are accelerated relative to deductions based on economic depreciation.

26. Amortize all geological and geophysical expenditures over two years.—The baseline tax system allows taxpayers to deduct the decline in the economic value of an investment over its economic life. However, the Tax Code allows geological and geophysical expenditures incurred in connection with oil and gas exploration in the United States to be amortized over two years for non-integrated oil companies, a span of time that is generally shorter than the economic life of the assets.

27. Allowance of deduction for certain energy efficient commercial building property.—The baseline tax system would not allow deductions in lieu of normal depreciation allowances for particular investments in particular industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. In contrast, the Tax Code allows a deduction for certain energy efficient commercial building property. The basis of such property is reduced by the amount of the deduction. This provision expired on December 31, 2017.

28. Credit for construction of new energy efficient homes.—The baseline tax system would not allow credits for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. However, the Tax Code allowed contractors a tax credit of \$2,000 for the construction of a qualified new energy-efficient home that had an annual level of heating and cooling energy consumption at least 50 percent below the annual consumption under the 2006 International Energy Conservation Code. The credit equaled \$1,000 in the case of a new manufactured home that met a 30 percent standard or requirements for EPA's Energy Star homes. This provision expired on December 31, 2017.

29. Credit for residential energy efficient property.—The baseline tax system would uniformly tax all returns to investments and not allow credits for particular activities, investments, or industries. However, the Tax Code provides a credit for the purchase of a qualified

photovoltaic property and solar water heating property, as well as for fuel cell power plants, geothermal heat pumps, and small wind property used in or placed on a residence. The credit is 30 percent for property placed in service before January 1, 2020, 26 percent for property placed in service in 2020, and 22 percent for property placed in service in 2021.

30. Credit for qualified energy conservation bonds.—The baseline tax system would uniformly tax all returns to investments and not allow credits for particular activities, investments, or industries. However, the Tax Code provides for the issuance of energy conservation bonds which entitle the bond holder to a Federal income tax credit in lieu of interest. As of March 2010, issuers of the unused authorization of such bonds could opt to receive direct payment with the yield becoming fully taxable.

31. Advanced energy property credit.—The baseline tax system would not allow credits for particular activities, investments, or industries. However, the Tax Code provides a 30 percent investment credit for property used in a qualified advanced energy manufacturing project. The Department of the Treasury may award up to \$2.3 billion in tax credits for qualified investments.

32. Advanced nuclear power facilities production credit.—The baseline tax system would not allow credits or deductions for particular activities, investments, or industries. Instead, it generally would seek to tax uniformly all returns from investment-like activities. In contrast, the Tax Code allows a tax credit equal to 1.8 cents times the number of kilowatt hours of electricity produced at a qualifying advanced nuclear power facility. A taxpayer may claim no more than \$125 million per 1,000 megawatts of capacity. The Department of the Treasury may allocate up to 6,000 megawatts of credit-eligible capacity. Any unutilized national capacity limitation shall be allocated after December 31, 2020, according to prioritization rules set forth by statute.

33. Reduced tax rate for nuclear decommissioning funds.—The baseline tax system would uniformly tax all returns to investments and not allow special rates for particular activities, investments, or industries. In contrast, the Tax Code provides a special 20 percent tax rate for investments made by Nuclear Decommissioning Reserve Funds.

Natural Resources and Environment

34. Expensing of exploration and development costs, nonfuel minerals.—The baseline tax system allows the taxpayer to deduct the depreciation of an asset according to the decline in its economic value over time. However, certain capital outlays associated with exploration and development of nonfuel minerals may be expensed rather than depreciated over the life of the asset.

35. Excess of percentage over cost depletion, nonfuel minerals.—The baseline tax system allows the taxpayer to deduct the decline in the economic value of an investment over time. Under current law, however,

附件十三

美国太阳能税收抵免政策介绍 (Solar Investment Tax Credit ITC)

Solar Investment Tax Credit (ITC)

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The solar Investment Tax Credit (ITC) is one of the most important federal policy mechanisms to support the deployment of solar energy in the United States. SEIA successfully advocated for a multi-year extension of the credit in 2015, which provides business certainty to project developers and investors. The ITC continues to drive growth in the industry and job creation across the country.

Quick facts

- The ITC is a 30 percent tax credit for solar systems on residential (under Section 25D) and commercial (under Section 48) properties.
- The residential and commercial solar ITC has helped annual solar installation grow by over 1,600 percent since the ITC was implemented in 2006 - a compound annual growth rate of 76 percent. (See more [solar industry data.](#))
- The existence of the ITC through 2021 provides market certainty for companies to develop long-term investments that drive competition and technological innovation, which in turn, lowers costs for consumers.

What is the Solar Investment Tax Credit?

The Investment Tax Credit (ITC) is currently a 30 percent federal tax credit claimed against the tax liability of residential (Section 25D) and commercial and utility (Section 48) investors in solar energy property. The Section 25D residential ITC allows the homeowner to apply the credit to his/her personal income taxes. This credit is used when homeowners purchase solar systems outright and have them installed on their homes. In the case of the Section 48 credit, the business that installs, develops and/or finances the project claims the credit.

How does the Solar Investment Tax Credit Work?

A tax credit is a dollar-for-dollar reduction in the income taxes that a person or company claiming the credit would otherwise pay the federal government. The ITC is based on the amount of investment in solar property. Both the residential and commercial ITC are equal to 30 percent of the basis that is invested in eligible property which have commence construction through 2019. The ITC then steps down to 26 percent in 2020 and 22 percent in 2021. After 2021, the residential credit will drop to zero while the commercial and utility credit will drop to a permanent 10 percent

Commercial and utility projects which have commenced construction before December 31, 2021 may still qualify for the 30, 26 or 22 percent ITC if they are placed in service before December 31, 2023. The Treasury and IRS are currently drafting guidance which will inform solar developers of which percentage of ITC they will qualify for depending on when they started their project

History of the Solar Investment Tax Credit

The Energy Policy Act of 2005 (P.L. 109-58) created a 30 percent ITC for residential and commercial solar energy systems that applied to projects placed in service between January 1, 2006 and December 31, 2007. In 2006, the Tax Relief and Health Care Act (P.L. 109-432) extended these credits for one additional year through December 31, 2008.

In 2008, the Emergency Economic Stabilization Act (P.L. 110-343) included an eight-year extension of the residential and commercial ITC, eliminated the monetary cap for residential solar electric installations and permitted utilities and companies paying the alternative minimum tax (AMT) to qualify for the credit.

In 2015, the Omnibus Appropriations Act (P.L. 114-113) included a multi-year extension of the residential and commercial ITC described above and changed the previous “placed-in-service” standard for qualification for the credit to a “commence construction” standard for projects completed by the end of 2023.

In addition to the commence construction guidance underway at the Treasury and IRS referenced above, a broader regulatory project is also underway defining what property qualifies as solar energy property as defined under Section 48. Examples of property under consideration are energy storage, carports, solar canopies and roofing.

What Will Be the Impact of the Recent ITC Extension?

The ITC has proven to be one of the most important federal policy mechanisms to incentivize the deployment of both rooftop and utility-scale solar energy in the United States. As a result of the multi-year extension of the credit enacted in late-2015, solar prices are expected to continue to fall while installation rates and technological efficiencies will continue to climb. The ITC is nothing short of a tax policy success story and we expect this fact to continue to play out over the next several years.

Specifically, we expect the roughly 27 gigawatts of solar energy cumulatively installed in the US at the end of 2015 to reach nearly 100 GW by the end of 2020. Moreover, the roughly 210,000 Americans currently employed in solar is expected to double to 420,000 in the same time period - all this while spurring roughly \$140 billion in economic activity. The continued success of the ITC demonstrates that stable, long-term federal tax incentives can drive economic growth while reducing prices and creating jobs in one of America’s fastest-growing industries.

附件十四

OECD 化石燃料补贴数据库—

2016 年、2017 年美国各州向石油和天然气产业提供的补贴

Dataset: Fossil Fuel Support
- USA

Measure		Incidence	Indicator	Stage	Fuel Type	Unit	2015	2017
Measure		Incidence	Indicator	Stage	Fuel Type	Unit	2015	2017
Severance Tax Credit for Certain R&D Projects	Cost of Intermediate Inputs	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	0	0	0
Reduced Tax Rate for Certain Wells Outside the Bakken and Three Forks Region	Cost of Intermediate Inputs	Producer Support Estimate	Extraction or mining stage	Natural gas	Natural gas liquids	0	0	0
Coal Severance Tax Exemptions	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Anthracite	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Coking coal	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	0	0	0
Coal Conversion Tax Exemptions	Capital	Producer Support Estimate	Extraction or mining stage	Natural gas	Electricity-based support	0	0	0
Oil and Gas Tax Tribal Agreement Exemptions	Capital	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	0	0	0
Sales tax exemption for oil	Capital	Producer Support Estimate	Extraction or mining stage	Petroleum	Natural gas liquids	0	0	0
Development Credit for Small Producers and New Areas	Output Returns	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	36,299,536	0	0
Sales tax exemption for CO2 used for enhance oil recovery	Cost of Intermediate Inputs	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	13,700,464	0	0
Sales tax exemption for natural gas	Capital	Producer Support Estimate	Extraction or mining stage	Natural gas	Natural gas liquids	0	0	0
Alternative Credit for Exploration	Capital	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	0	0	0
Qualification of Oil from New or Expanded Enhanced Recovery Projects for Social Rate	Output Returns	Producer Support Estimate	Extraction or mining stage	Petroleum	Natural gas	36,299,536	0	0
Enhanced Recovery Projects Using Anthropogenic CO2	Output Returns	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	13,700,464	0	0
Oil and Gas from Wells previously Inactive	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	0	0	0
Exclusion of Low Volume Oil & Gas Wells	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	0	0	0
Coalbed Methane Exemption	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	0	0	0
Reduced Tax for Thin-Seamed Coal	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Crude oil	0	0	0
Percentage Depletion of Mineral and Other Resources	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	30,000,000	40,000,000	40,000,000
Thin Seam Tax Credit	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	5,217,053	6,983,947	6,983,947
Coal Transportation Expense	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Anthracite	1,462,211	1,548,503	1,548,503
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Coking coal	12,310	13,357	13,357
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	400,381	501,442	501,442
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Anthracite	1,787,09	1,785,201	1,785,201
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Coking coal	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Anthracite	19,585	20,326	20,326
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Coking coal	637,288	763,064	763,064
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	2,843,128	2,716,610	2,716,610
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Anthracite	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Coking coal	0	0	0
	Capital	Producer Support Estimate	Extraction or mining stage	Coal	Other bituminous coal	0	0	0
Excess of Percentage over Cost Depletion	Capital	Producer Support Estimate	Extraction or mining stage	Petroleum	Crude oil	2,700,000	2,600,000	2,600,000
Sales Tax Incentive for Alternative Fuel or Gasification Facilities	Capital	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Railroad Improvement Tax Credit	Capital	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Excess of Percentage over Cost Depletion	Capital	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Natural Gas Severance Tax	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	84,472,151	83,190,848	83,190,848
Suspension for Horizontal Wells	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	170,506	11,081,247	11,081,247
Natural Gas Severance Tax	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Suspension for Inactive Wells	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Natural Gas Severance Tax	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0
Suspension for Deep Wells	Land and natural resources	Producer Support Estimate	Extraction or mining stage	Natural gas	Crude oil	0	0	0

LMG Storage Facility Credit	Land and natural resources	0	0	0	0
Gas Exploration and Development Credit	Land and natural resources	0	0	0	0
Gross Value Reduction	Land and natural resources	0	0	0	0
Oil and Gas Industry Service Expenditures Credit	Capital	0	0	0	0
Sales Tax Exemption for Oil & Gas Equipment	Capital	0	0	0	0
Property Tax Exemption for Infrangible Drilling Expenses	Cost of Intermediate Inputs	0	0	0	0
In-State Refinery Tax Credit	Capital	0	0	0	0
Impact Assistance Credit	Capital	0	0	0	0
Severance Tax Reductions for Low-Volume Wells	Land and natural resources	0	0	0	0
Severance Tax Reduction for Underground Coal	Land and natural resources	0	0	0	0
Severance Tax Reduction for Lignite	Land and natural resources	0	0	0	0
Severance Tax Exemption for Low-Volume Coal Mining	Land and natural resources	0	0	0	0
Severance Tax Reductions for New Oil-Shale Facilities	Land and natural resources	0	0	0	0
Severance Tax Exemption for Low-Volume Oil-Shale Production	Land and natural resources	0	0	0	0
Occupational-Privilege-Tax Exemption for Oil and Gas Workers	Labour	0	0	0	0
Reduced Value for Certain Mineral Properties	Land and natural resources	0	0	0	0
Sales Tax Exemption for CO2 Used in Tertiary Recovery	Cost of Intermediate Inputs	0	0	0	0
Sales Tax Exclusion for Installation of Board Roads in Oil-fields	Land and natural resources	0	0	0	0
Sales Tax Exclusion on Drilling Rigs	Land and natural resources	0	0	0	0
Sales Tax Exemption for Rentals and Materials Used on Drilling Rigs	Land and natural resources	0	0	0	0
Severance Tax Exemptions for Crude Oil and Natural Gas	Land and natural resources	0	0	0	0
Cost of Complying with Sulphur Regulations	Cost of Intermediate Inputs	0	0	0	0
Full Expensing of Capital Investments in Qualified New Refinery Capacity	Capital	0	0	0	0
Gross Production and Excise Tax Credits, Small Business and Rural	Enterprise Income	0	0	0	0
Coal Waste Removal Tax Credit	Capital	0	0	0	0
Realty Transfer Tax Exemption for Resource Leases	Land and natural resources	0	0	0	0
Alternative Energy Production Tax	Capital	0	0	0	0

[illegible]

Dataset: Fossil Fuel Support
- USA

Measure	Incidence	Indicator	Stage	Transportation of fossil fuels (e.g., through pipelines) Extraction or mining stage	Fuel Type	Mechanism	
						Budgetary transfer	Level
						Unit	Sub
						2016	2017
Alaska Gasline Inducement Act	Capital	Producer Support Estimate			Natural gas	United States dollar	
Coal Academy Mining Workforce Development	Labour	General Services Support Estimate			Coal		
Mine Safety and Licensing							
Oil and Gas Impact Grant Fund	Land and natural resources						
Abandoned Oil and Gas Well Plugging and Site Reclamation Fund					Petroleum		
Coal Development Trust Fund					Natural gas		
Abandoned Mine Reclamation Fund					Lignite		
Data extracted on 30 Apr 2020 08:29 UTC (GMT) from OECD.Stat							

Data extracted on 30 Apr 2020 08:29 UTC (GMT) from OECD.Stat

Fossil Fuel Support - USA

< < > -< OECD.Stat



Database Specific

Abstract

UNITED STATES: GENERAL METADATA

Data documentation

General notes

The fiscal year in the United States runs from 1 October to 30 September. Following OECD convention, data are allocated to the ending calendar year so that data covering the period October 2005 to September 2006 are allocated to 2006. States can, however, have a different fiscal year.

Since the United States is a federal country, data collection was also conducted for a sample comprising the following states: Alaska (AK), California (CA), Colorado (CO), Kentucky (KY), Louisiana (LA), North Dakota (ND), Oklahoma (OK), Pennsylvania (PA), Texas (TX), West Virginia (WV), and Wyoming (WY).

- Country note
- Sources

Source

Contact person/organisation

- ffs.contact@oecd.org

Name of collection/source

OECD (2018), OECD Companion to the Inventory of Support Measures for Fossil Fuels 2018, Paris.

Data Characteristics

Date last updated

Apr-19

Periodicity

Annual

Power code

Units

Unit of measure used

United States dollar

Concepts & Classifications

Key statistical concept

Indicator

PSE: Producer Support Estimate

GSSE: General Services Support Estimate

CSE: Consumer Support Estimate

Stage

EXTRACT: Extraction or mining stage

TRANS: Transportation of fossil fuels (e.g., through pipelines)

REFIN: Refining or processing stage

GENER: Use of fossil fuels in electricity generation

INDUS: Use of fossil fuels in the industrial sector

END: Other end uses of fossil fuels

Statutory or Formal Incidence

consumption: Direct consumption

returns: Output Returns

income: Enterprise Income

inputs: Cost of Intermediate Inputs

labour: Labour

land: Land and natural resources

capital: Capital

knowledge: Knowledge

■ **Other Aspects**

■ **Other comments**

- **OECD Companion to the Inventory of Support Measures for Fossil Fuels 2018**

■ **Recommended uses and limitations**

Users of tax expenditure estimates should bear in mind that the Inventory records tax expenditures as estimates of revenue that is foregone due to a particular feature of the tax system that reduces or postpones tax relative to a jurisdiction's benchmark tax system, to the benefit of fossil fuels. Hence, (i) tax expenditure estimates could increase either because of greater concessions, relative to the benchmark tax treatment, or

because of a raise in the benchmark itself; (ii) international comparison of tax expenditures could be misleading, due to country-specific benchmark tax treatments.

UNITED STATES: SOURCES

Policies or transfers

- Alaska Department of Revenue (2014), *Alaska Indirect Expenditure Report*, Tax Division, State of Alaska, Available at: www.tax.alaska.gov/programs/documentviewer/viewer.aspx?1083r.
- Alaska Department of Revenue (various years), *Revenue Sources Book*, Tax Division, State of Alaska, Available at: www.tax.alaska.gov/programs/sourcebook/index.aspx.
- Alaska Energy Authority (various years), *Statistical Report of the Power Cost Equalization Program*, Available at: www.akenergyauthority.org/programspce.html.
- Alaska OMB (various years), *Budget Reports*, Office of Management and Budget, Office of the Governor of the State of Alaska, Available at: omb.alaska.gov/html/budget-report/fy-2013-budget.html.
- Bureau of Land Management (2016), *Rule on Waste Prevention, Production Subject to Royalties, and Resource Conservation*, available at: <https://www.regulations.gov/document?D=BLM-2016-0001-9126>
- Bureau of Land Management (2017), *Extension of the Category 5 Royalty Rate Reduction Qualification for Oklahoma Federal Coal Within a Designated Area of Nine Oklahoma Counties (OKNM 96155)*, available at: <https://www.govinfo.gov/content/pkg/FR-2017-06-29/pdf/2017-13630.pdf>
- C2ER (2015), *State Business Incentives Database* (database), Council for Community and Economic Research, Available at: www.stateincentives.org (accessed 18 March 2015).
- California Department of Finance (various years), *Tax Expenditure Report*, Economic and Financial Research, State of California, Available at: www.dof.ca.gov/research/economic-financial/#anchorTaxExpenditureReports
- Colorado Department of Natural Resources (2009), *Department Description: FY2010-11 Budget Request*, November 2009.
- Colorado Department of Revenue (various years), *Colorado Sales Tax Exemption Study*, State of Colorado, Available at: www.colorado.gov/pacific/revenue/colorado-tax-exemption-study.
- Colorado Department of Revenue (2014) – correspondence.
- Colorado Department of Revenue (various years), *Colorado Tax Profile and Expenditure Reports*, available at: <https://www.colorado.gov/pacific/revenue/colorado-tax-profile-and-expenditure-reports>
- Colorado General Assembly (2014), *Severance Tax Research Project*, State of Colorado, Available at: [www.leg.state.co.us/CLICS/CLICS2014A/commsumm.nsf/b4a3962433b52fa787256e5f00670a71/6e505a47c1f2abad87257cc3004f788e/\\$FILE/140423%20AttachC.pdf](http://www.leg.state.co.us/CLICS/CLICS2014A/commsumm.nsf/b4a3962433b52fa787256e5f00670a71/6e505a47c1f2abad87257cc3004f788e/$FILE/140423%20AttachC.pdf).

- Colorado Revised Statutes, Colorado Legal Resources, Provided by LexisNexis (database), Available at: www.lexisnexis.com/hottopics/colorado/ (accessed 16 March 2015).
- Commonwealth of Kentucky (various years), *Tax Expenditure Analysis*, Office of State Budget Director, Available at: www.osbd.ky.gov/publications/specialreports.htm.
- Commonwealth of Pennsylvania (various years), *Governor's Executive Budget*, Pennsylvania Office of the Budget, Available at: www.portal.state.pa.us/portal/server.pt/community/past_budgets/4571.
- Congressional Budget Office (2013), *Estimates of the Budgetary Effects of S. 953, the Student Loan Affordability Act*, available at: <http://www.cbo.gov/sites/default/files/cbofiles/attachments/s953.pdf>
- CRS (2012), *Tax Expenditures – Compendium of Background Material on Individual Provisions*, Prepared for the use of the Committee on the Budget by the Congressional Research Service, United States Senate, March 2013, Washington D.C., Available at: www.budget.senate.gov/democratic/public/index.cfm/2013/3/tax-expenditures.
- DOE (2015), Savings and Rebates (database), US Department of Energy, Available at: energy.gov/ (accessed 19 March 2015).
- Department of Health and Social Services (2016), *Grant Book*, State of Alaska, available at: <http://dhss.alaska.gov>.
- EIA (1999), *Federal Financial Interventions and Subsidies in Energy Markets 1999: Primary Energy*, U.S. Energy Information Administration, U.S. Department of Energy, U.S. Government, Available at: [www.eia.gov/oiaf/servicerpt/subsidy/pdf/sroiaf\(99\)03.pdf](http://www.eia.gov/oiaf/servicerpt/subsidy/pdf/sroiaf(99)03.pdf).
- EIA (2008), *Federal Financial Interventions and Subsidies in Energy Markets 2007*, U.S. Energy Information Administration, U.S. Department of Energy, U.S. Government, Available at: www.eia.doe.gov/oiaf/servicerpt/subsidy2/index.html.
- Goldsmith, Scott (2014), *Alaska's Oil Production Tax: Comparing the Old and the New*, Institute of Social and Economic Research, Web Note No. 17, May 2014, Available at: http://iser.uaa.alaska.edu/Publications/webnote/2014_05_01_WebNote17WhereDidthe2BillionGo.pdf.
- IOGCC (2007), *Investments in Energy Security: state incentives to maximize oil and gas recovery*, Interstate Oil and Gas Compact Commission, Oklahoma City, Available at: iogcc.myshopify.com/products/investments-in-energy-security-state-incentives-to-maximize-oil-and-gas-recovery-2007.
- IRS (2013), *Notice 2013-50: 2013 Section 43 Inflation Adjustment*, Internal Revenue Bulletin: 2013-32, Internal Revenue Service, U.S. Government, 5 August 2013, Washington D.C, Available: www.irs.gov/irb/2013-32_IRB/ar08.html.
- JCT (various years), *Estimates of Federal Tax Expenditures*, Joint Committee on Taxation, Congress of the United States, Available at: www.jct.gov/publications.html?func=select&id=5.
- JCT (various years), *List of Expiring Federal Tax Provisions*, Joint Committee on Taxation, Congress of the United States, Available at: www.jct.gov/publications.html?func=select&id=10.
- Kaiser, Mark J. and Allan G. Pulsipher (2003), "LIHEAP reconsidered", *Energy Policy*, Vol. 31, No. 14, Elsevier, Amsterdam, pp. 1441-1458.

- Kentucky Community and Technical College System, *Kentucky Coal Academy*, Available at: coalacademy.kctcs.edu.
- Kentucky Office of State Budget Director (various years), *Budget of the Commonwealth*, Commonwealth of Kentucky, Available at: www.osbd.ky.gov/publications/buddocs.htm.
- Koplow, Douglas and Aaron Martin (1998), *Fueling Global Warming: Federal Subsidies to Oil in the United States*, Washington DC: Greenpeace by Industrial Economics, Inc.
- Louisiana Department of Revenue (various years), *Tax Exemption Budget*, Available at: [revenue.louisiana.gov/publications/TEB\(2013\).pdf](http://revenue.louisiana.gov/publications/TEB(2013).pdf).
- LIHEAP Clearinghouse (various years), *Low-Income Energy Programs Funding History 1977-2014*, Available at: www.liheap.ncat.org/Funding/energyprogs_hist.htm.
- North Dakota Industrial Commission (2013), *Lignite Research Program: 2013-2015 Budget*, Available at: www.nd.gov/ndic/lrc/lrcinfo/lrc-financials.pdf.
- North Dakota Legislative Council (2013), *2013-15 Oil and Gas Tax Revenue Allocation Flowchart*, Available at: www.legis.nd.gov/files/resource/15.9055.01000.pdf?20140821052221.
- North Dakota Office of State Tax Commissioner [a], *2013 Legislative Changes to Gross Production Tax and Oil Extraction Tax*, Available at: www.nd.gov/tax/oilgas/pubs/legislativechangenotice.pdf?20140702110321.
- North Dakota Office of State Tax Commissioner [b] (2014) – personal communication [August 2014].
- North Dakota Office of State Tax Commissioner [c] (2012), *State and Local Taxes: An Overview and Comparative Guide 2012*, Available at: www.nd.gov/tax/genpubs/2012-redbook.pdf?20140703035925.
- North Dakota Office of State Tax Commissioner [d] (2013), *North Dakota Taxation: An Overview of Major State and Local Taxes in North Dakota*, Available at: www.nd.gov/tax/genpubs/nd-tax-overview.pdf?20140703035914.
- Department of Trust Lands (various years), *Accounting and Investments*, North Dakota State Government, available at: <https://land.nd.gov/AccountingAndInvestments>
- Office of Management and Budget (2013), *State Budget*, North Dakota State Government, available at: <https://www.nd.gov/omb/agency/financial/state-budget>
- Office of Surface Mining Reclamation and Enforcement (various years), *Grants Resources*, U.S. Department of the Interior, available at: <https://www.osmre.gov/resources/grants.shtm>
- OECD (2015), *OECD Companion to the Inventory of Support Measures for Fossil Fuels 2015*, OECD Publishing, Paris.
- Oklahoma Policy Institute (2011), *Oklahoma's Gross Production Taxes and Exemptions*, Available at okpolicy.org/files/GPT2011.pdf
- Oklahoma Tax Commission (various years), *Tax Expenditure Report*, Oklahoma Tax Policy Division, Available at: https://www.ok.gov/tax/Forms_&Publications/Publications/Tax_Expenditure/.

- OMB (various years), *Analytical Perspectives – Budget of the United States Government*, Office of Management and Budget, Executive Office of the President of the United States, U.S. Government, Available at: www.gpoaccess.gov/usbudget/browse.html.
- State of Alaska (2015), *AGIA Fund Disbursement Report*, Report for the State legislature prepared jointly by the Department of Revenue and the Department of Natural Resources, Available at: dor.alaska.gov/Portals/5/January%202015%20AGIA%20Disbursement%20Report%20to%20Legislature%20-%20FINAL%20complete.pdf.
- State of Louisiana (various years). *State Budget*, Division of Administration, Office of Planning and Budget, Available at: www.doa.louisiana.gov/OPB/state-budget.htm.
- State of Oklahoma (various years). *Executive Budget – Historical Data*, Oklahoma Office of State Finance, Available at: www.ok.gov/OSF/documents/bud13.pdf.
- Texas Comptroller of Public Accounts (2008), *The Energy Report*, Research and Analysis Division, May 2008, Available at: www.window.state.tx.us/specialrpt/energy/.
- Texas Comptroller of Public Accounts (2011), *Biennial Revenue Estimate 2012-2013*, Window on State Government, Financial Reports, Available at: www.window.state.tx.us/taxbud/bre2012/.
- Texas Comptroller of Public Accounts (2013), *Biennial Revenue Estimate 2014-2015*, Window on State Government, Financial Reports, Available at: www.texas transparency.org/State_Finance/Budget_Finance/Reports/Biennial_Revenue_Estimate/bre2014/BRE_2014-15.pdf.
- Texas Comptroller of Public Accounts (various years), *Tax Exemptions and Tax Incidence*, Window on State Government, Financial Reports, Available at: www.texas transparency.org/State_Finance/Budget_Finance/Reports/Tax_Exemptions_and_Incidence/.
- Texas Comptroller of Public Accounts (various years), *Annual Financial Reports*, Window on State Government, Financial Reports, Available at: <https://comptroller.texas.gov/transparency/reports/annual-financial/>.
- University of Wyoming, *Project Awards*, School of Energy Resources, Available at: www.uwyo.edu/ser/research/advanced-conversion-research/awards/ (accessed on 14 August 2012).
- U.S. Census Bureau (2002), *2002 Economic Census* (database), U.S. Department of Commerce, U.S. Government, Available at: www.census.gov/econ/census02/index.html (accessed 16 March 2015).
- U.S. Census Bureau (2007), *2007 Economic Census* (database), U.S. Department of Commerce, U.S. Government, Available at: www.census.gov/econ/census/ (accessed 16 March 2015).
- U.S. Dep. of Energy (2014), *Strategic Petroleum Reserve Annual Report for Calendar Year 2012*, Office of Petroleum Reserves, U.S. Government, Available at: energy.gov/fe/downloads/spr-annual-reports-congress.
- U.S. Dep. of Energy (various years), *DOE's Fossil Energy Budget*, U.S. Government, Available at: energy.gov/fe/about-us/our-budget.

- U.S. Dep. of Energy (various years), *Budget*, U.S. Government, Available at: <https://www.energy.gov/cfo/listings/budget-justification-supporting-documents>.
- U.S. Dep. of Health and Human Services (various years), *LIHEAP Report to Congress*, Office of Community Services, Administration for Children and Families, U.S. Government, Washington D.C, Available at: <https://www.acf.hhs.gov/ocs/resource/liheap-reports-to-congress>.
- U.S. Department of the Treasury (various years), *Tax Expenditures*, United States Government, available at: <https://www.treasury.gov/resource-center/tax-policy/Pages/Tax-Expenditures.aspx>
- West Virginia State Tax Department (various years), *West Virginia Tax Expenditure Study: Special Business Tax, Business Registration Tax, Excise Tax, and Property Tax Expenditures*, State of West Virginia, Available at: www.state.wv.us/taxrev/publications/TaxExpenditureStudy.2015.01.pdf.
- Wyoming Department of Revenue, Frequently Asked Questions: Property Tax, State of Wyoming,, Available at: revenue.state.wy.us/PortalVBVS/DesktopDefault.aspx?tabindex=4&tabid=11 (accessed on 13 August 2012).
- Wyoming State Government (various years), *Individual Agency Budgets: Requests and Recommendations*, Budget Division, Available at: <http://ai.wyo.gov/budget-division/budget-fiscal-years/2015-2016-budget>.
- Wyoming Statutes Annotated, Wyoming Legal Resources, Provided by LexisNexis (database), Available at: www.lexisnexis.com/hottopics/wy statutes/ (accessed 16 March 2015).

Energy statistics

- EIA [a], *State Energy Data System (SEDS)*, U.S. Energy Information Administration, U.S. Department of Energy, U.S. Government (database), available at: www.eia.gov/state/seds/ (accessed 16 March 2015).
- EIA [b], *Fuel Oil and Kerosene Sales*, 2013 Edition, U.S. Energy Information Administration, U.S. Department of Energy, U.S. Government, Washington D.C, available at: www.eia.gov/petroleum/fueloilkerosene.
- FHA (various years), *Monthly Motor Fuel Reported by States*, Motor Fuel & Highway Trust Fund, Federal Highway Administration, U.S. Department of Transportation, U.S. Government, available at: www.fhwa.dot.gov/policyinformation/motorfuelhwy_trustfund.cfm.
- IEA (2018), *World Energy Balances 2018*, OECD Publishing, Paris
DOI: https://doi.org/10.1787/world_energy_bal-2018-en
- IEA short term Energy Outlook Data Browser <https://www.eia.gov/outlooks/steo/data/browser/#/?v=9>
- IEA (2018), *Refinery Capacity Report*
- IPAA (various years), *Oil & Natural Gas Production in Your State*, Reports & Statistics: Economic Reports & Industry Statistics, Independent Petroleum Association of America, Washington, D.C.
- Railroad Commission of Texas (various years), *Historical Production Data*, available at: www.rrc.state.tx.us/oil-gas/research-and-statistics/production-data/historical-production-data/.

附件十五

美国德克萨斯州对企业扶持、补贴的有关法令、政策 及企业获补贴情况

10

Chapter 380 of the Texas Local Government Code

**Texas City Attorneys Association
Riley Fletcher Basic Municipal Law Seminar
Lubbock, Texas
February 24, 2006**

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What are chapter 380 grants?

Chapter 380 is a reference to chapter 380 of the Texas Local Government Code. This chapter of the Texas Local Government Code authorizes Texas municipalities, both home-rule and general law municipalities to provide assistance for economic development. Texas cities may provide monies, loans, city personnel, and city services for promotion and encouragement of economic development.

What type of assistance may a city provide under chapter 380 of the Local Government Code for economic development?

Cities are authorized to "provide for the administration of one or more programs, including programs for making loans and grants of public money and providing personnel and services of the municipality." Nonetheless, the programs must serve the purpose of promoting state or local economic development by stimulating business and commercial activity within the city, within the extraterritorial jurisdiction (or "ETJ") of the city, or an area annexed by the city for limited purposes.¹

What constitutes serving a public purpose?

The Texas Constitution requires all expenditures of municipal funds serve a "public purpose."² Accordingly, expenditures pursuant to chapter 380 programs must also serve a public purpose. Prior to 1987, Texas cities did not have constitutional authorization to provide economic assistance to businesses for economic development. In 1987, the Texas voters approved a constitutional amendment which provided that grants of monies for economic development may serve a "public purpose." Article III, section 52-a of the Texas Constitution authorizes "the making of loans and grants of public money . . . for the public purposes of development and diversification of the economy of the state, the elimination of unemployment or underemployment in the state . . . or the development or expansion of transportation or commerce in the state."³ Further, any transaction providing public monies must contain sufficient controls "to insure that the public purpose [is] carried out."⁴

¹ TEX. LOC. GOV'T CODE ANN. § 380.001(a) (as amended by Texas House Bill 918, 79th Legislature, Regular Session (2005) (effective date May 17, 2005)).

² TEX. CONST. art. III, § 52(a). *See also, Texas Mun. League Intergovernmental Risk Pool v. Tex. Workers' Comp. Comm'n*, 74 S.W.3d 377, 384 (Tex. 2002) ("A political subdivision's paying public money is not gratuitous, within meaning of state constitutional provision prohibiting gratuitous payments to individuals, associations, or corporations, if the political subdivision receives return consideration.").

³ TEX. CONST. art. III, § 52-a.

⁴ Tex. Att'y Gen. Op. No. JM-1255 (1990) at 8-9.

Is there a durational limitation on economic assistance provided under chapter 380 of the Texas Local Government Code?

Unlike tax abatements which are limited to ten (10) years,⁵ chapter 380 of the Local Government Code does not contain a durational limitation. Consequently, some Texas cities have entered into 380 agreements which extend beyond ten (10) years. Whether your particular city has a durational limitation may be controlled by a home-rule city charter or other local provision.

Can you abate delinquent taxes under chapter 380 of the Local Government Code?

Article III, section 55 of the Texas Constitution provides that the legislature "shall have no power to release or extinguish, or to authorize the releasing or extinguishing, in whole or in part, the indebtedness, liability or obligation of any corporation or individual, to this State or to any country or defined subdivision thereof." Consequently, in a Texas Attorney General opinion, the Attorney General concluded "section 380.001(a) of the Local Government Code does not authorize a municipality, as part of an economic development program, to agree to abate a taxpayer's delinquent taxes."⁶

Can a City provide a municipal sales tax rebate as a form of chapter 380 grant?

Many cities may condition the grant or loan of public monies based upon estimated sales tax revenue generated by the business prospect. In a recent Texas Attorney General opinion, the Attorney General considered whether recent legislative changes prevented Texas cities from providing chapter 380 grants in the form of a sales tax rebate.⁷ The Attorney General concluded the "Local Government Code authorizes municipalities to refund or rebate municipal sales taxes and otherwise expend public funds for certain economic development purposes."⁸ Further, the recent legislative change "does not invalidate existing tax rebate contracts, nor does it prohibit municipalities from executing new ones."⁹

⁵ TEX. TAX CODE ANN. § 312.204(a) (Vernon Supp. 2004-05).

⁶ Tex. Att'y Gen. Op. No. LO-95-090 (1995).

⁷ Tex. Att'y Gen. Op. No. GA-0071 (2003).

⁸ Tex. Att'y Gen. Op. No. GA-0137 (2004) at 1.

⁹ *Id.* at 4.

Can a City provide section 4A or 4B economic development corporations city funds for economic development?

A home-rule municipality may provide public money to a section 4A or section 4B corporation.¹⁰ Nonetheless, the grant of public monies must be pursuant to a contract. Further, the development corporation must use the grant money for the "development and diversification of the economy of the state, elimination of unemployment or underemployment in the state, and development and expansion of commerce in the state."¹¹

¹⁰ TEX. LOC. GOV'T CODE ANN. § 380.002(b).

¹¹ *Id.*

Chapter 380 of the Texas Local Government Code

*** Section 380.001(a) as amended by Texas House Bill 918, 79th Legislature, Regular Session (2005) (effective date May 17, 2005)**

§ 380.001. ECONOMIC DEVELOPMENT PROGRAMS.

(a) ~~_____ may establish and provide for the _____ for making loans and grants _____ of the municipality, to promote _____ business and commercial activity in _____ includes an area that:~~

~~(1) _____ by the municipality for limited purposes; or~~

~~(2) _____ of the municipality.~~

(b) ~~_____ may:~~

(1) ~~administer a program by the use of municipal personnel;~~

(2) ~~contract with the federal government, the state, a political subdivision of _____ organization, or any other entity for the _____ and~~

(3) ~~accept contributions, gifts, or other resources to develop and administer a program.~~

(c) ~~_____ Texas-Mexico border with a population of more than 500,000 _____ and cooperative associations for the purpose of _____ hub to stimulate economic _____ as an international intermodal _____ may be combined with or near local, state, or federal facilities and facilities of Mexico in order to fulfill its purpose.~~

~~Added by Acts 1989, 71st Leg., ch. 555, § 1, eff. June 14, 1989. Amended by Acts 1999, _____ 1999.~~

§ 380.002. ECONOMIC DEVELOPMENT GRANTS BY CERTAIN MUNICIPALITIES.

(a) A home-rule municipality with a population of more than 100,000 may create programs for the grant of public money to any organization exempt from taxation under Section 501(a) of the Internal Revenue Code of 1986 as an organization described in Section 501(c)(3) of that code for the public purposes of development and diversification of the economy of the state, elimination of unemployment or underemployment in the state, and development or expansion of commerce in the state. The grants must be in furtherance of those public purposes and shall be used by the recipient as determined by the recipient's governing board for programs found by the municipality to be in furtherance of this section and under conditions prescribed by the municipality.

(b) A home-rule municipality may, under a contract with a development corporation created by the municipality under the Development Corporation Act of 1979 (Article 5190.6, Vernon's Texas Civil Statutes), grant public money to the corporation. The development corporation shall use the grant money for the development and diversification of the economy of the state, elimination of unemployment or underemployment in the state, and development and expansion of commerce in the state.

(c) The funds granted by the municipality under this section shall be derived from any source lawfully available to the municipality under its charter or other law, other than from the proceeds of bonds or other obligations of the municipality payable from ad valorem taxes.

Added by Acts 1991, 72nd Leg., ch. 16, § 13.06(a), eff. Aug. 26, 1991. Amended by Acts 1991, 72nd Leg., 1st C.S., ch. 4, § 25.02, eff. Aug. 22, 1991; Acts 2001, 77th Leg., ch. 56, § 1, eff. Sept. 1, 2001.

§ 380.003. APPLICATION FOR MATCHING FUNDS FROM FEDERAL GOVERNMENT.

A municipality may, as an agency of the state, provide matching funds for a federal program that requires local matching funds from a state agency to the extent state agencies that are eligible decline to participate or do not fully participate in the program.

Added by Acts 1995, 74th Leg., ch. 1051, § 1, eff. June 17, 1995.

*** Article III, Section 52-a of the Texas Constitution (as amended November 8, 2005)**

Sec. 52-a. Notwithstanding any other provision of this constitution, the legislature may provide for the creation of programs and the making of loans and grants of public money, other than money otherwise dedicated by this constitution to use for a different purpose, for the public purposes of development and diversification of the economy of the state, the elimination of unemployment or underemployment in the state, the stimulation of agricultural innovation, the fostering of the growth of enterprises based on agriculture, or the development or expansion of transportation or commerce in the state. Any bonds or other obligations of a county, municipality, or other political subdivision of the state that are issued for the purpose of making loans or grants in connection with a program authorized by the legislature under this section and that are payable from ad valorem taxes must be approved by a vote of the majority of the registered voters of the county, municipality, or political subdivision voting on the issue. A program created or a loan or grant made as provided by this section that is not secured by a pledge of ad valorem taxes or financed by the issuance of any bonds or other obligations payable from ad valorem taxes of the political subdivision does not constitute or create a debt for the purpose of any provision of this constitution. An enabling law enacted by the legislature in anticipation of the adoption of this amendment is not void because of its anticipatory character.

Taxes

Manufacturing Exemptions

State sales and use tax exemptions are available to taxpayers who manufacture, fabricate or process tangible personal property for sale.

Texas sales and use tax exempts tangible personal property that becomes an ingredient or component of an item manufactured for sale, as well as taxable services performed on a manufactured product to make it more marketable.

The exemption also applies to tangible personal property that makes a chemical or physical change in the product being manufactured and is necessary and essential in the manufacturing process. Some items, such as hand tools, are excluded from the exemption. A hammer, for example, is taxable even if it is used in fabricating a product for sale.

Who can get the exemption?

To qualify for a manufacturing exemption, the taxpayer must manufacture, fabricate or process tangible personal property for sale; repair tangible personal property from their own inventory for sale (rebuilders); or repair tangible personal property from their own inventory for rental.

The manufacturing exemption does not extend to contractors, persons who repair property belonging to others and service providers (such as data processors and nonresidential remodelers) even when they manufacture tangible personal property for use in performing their services. Separately stating manufactured repair parts on a customer's invoice does not make the taxpayer a manufacturer eligible for this exemption.

What is exempt?

The manufacturing exemption applies to machinery or equipment that causes a physical or chemical change in a product in order to make it saleable. The manufacturing process generally begins with the first activity that changes raw materials or ingredients and ends with the packaging of the tangible personal property as it will be sold.

Besides manufacturing equipment, services performed directly on a manufactured item prior to its distribution for sale and component parts for qualifying equipment, the following items also qualify for exemption:

- items used in manufacturing if necessary and essential to pollution control;
- lubricants, chemicals, gases and liquids used in manufacturing if necessary and essential to prevent the failure or deterioration of exempt manufacturing equipment;

- gases used at a manufacturing plant to prevent contamination of raw material or product, or to prevent hazards during manufacturing or while loading or storing products and raw materials;
- items that test products during the manufacturing process;
- safety apparel and work clothing required by the manufacturing process, if not resold to employees;
- items used in manufacturing if necessary and essential to comply with public health laws and rules;
- items used in manufacturing if specifically installed to reduce water use and wastewater flow, reuse and recycle wastewater, or treat wastewater from other sources to replace the use of fresh water;
- repairs to items that qualify for a manufacturing exemption;
- transformers at an electric generating facility that increase the voltage of electricity generated for ultimate sale; the cable that carries the electricity from the generating equipment to the step-up transformers; and the switches, breakers, capacitor banks, regulators, relays, reclosers, fuses, interruptors, reactors, arrestors, resistors, insulators, instrument transformers and telemetry units that are related to the step-up transformers;
- transformers that decrease the voltage of electricity generated for ultimate sale and the switches, breakers, capacitor banks, regulators, relays, reclosers, fuses, interruptors, reactors, arrestors, resistors, insulators, instrument transformers and telemetry units that are related to the step-down transformers;
- chemicals, catalysts, and other materials used during the manufacturing process to produce a chemical or physical change, to remove impurities, or to make the product more marketable; and
- semiconductor fabrication cleanrooms.

What is not exempt?

Non-qualifying machinery, equipment, supplies and labor

The following items do not qualify for the manufacturing exemption or refund:

- intraplant transportation equipment such as conveyors, pipes, forklifts, hoists, cranes and hydraulic lifts;
- maintenance and janitorial supplies and equipment;
- machinery, equipment, materials and supplies used incidentally in manufacturing;
- hand tools;
- office equipment and supplies;
- equipment and supplies used in sales and distribution activities;
- taxable items not used in the actual manufacturing operation;
- taxable items used in research and development of new products;
- taxable items used for transportation;
- machinery and equipment used to make items for the manufacturer's use rather than for sale;
- electrical wiring, electrical switches and plumbing incorporated into realty;
- machinery or equipment used to maintain or store the product;
- tangible personal property used in the transmission or distribution of electricity; and

- items rented or leased for less than one year.

Manufacturing support

Machinery and equipment used for manufacturing support but not directly in the manufacturing process generally do not qualify for the manufacturing exemption.

Examples of non-qualifying, taxable manufacturing support equipment include air conditioning for employee comfort, equipment used to make molds or dies, and equipment used to make other equipment that is then used to make a product for sale.

Some items are exempt, however, when they are used to power, supply, support or regulate equipment for pollution control or equipment that directly changes the product for sale. This category includes items such as actuators, steam production equipment and its fuel, in-process flow-through tanks, cooling towers, generators, heat exchangers, transformers (and the switches, breakers, capacitor banks, regulators, relays, reclosers, fuses, interrupters, reactors, arrestors, resistors, regulators, instrument transformers and telemetry units related to the transformers), electronic control room equipment, computerized control units, pumps, compressors and hydraulic units.

Leased and rented property

Manufacturing exemptions do not apply to property leases or rented for less than a year. Financing leases, however, are treated as alternative methods to finance the purchase of equipment. Eligible manufacturing equipment purchased through a financing lease qualifies for the exemption to the extent that tax was paid.

Contractors and Improvements to Realty

Lump-sum contractors

Under a lump-sum contract for new construction, neither the contractor nor the manufacturer can claim a refund for tax paid on installed machinery or equipment. Under a lump-sum contract for remodeling, however, a manufacturer can get a refund of tax paid on qualifying equipment.

Separated contractors

Under a separated contract, machinery and equipment installed as an improvement to realty qualifies for exemption if identified separately from any nonqualifying materials.

Improvements to realty

Generally, real property improvements do not qualify for a manufacturing exemption or refund. Machinery and equipment as well as their repair and replacement parts can qualify, however, if being affixed to realty does not change their separate identity. When machinery or equipment becomes an improvement to realty, labor to install or repair the item does not qualify for exemption.

Wrapping and Packaging Machinery

Wrapping and packaging machinery and equipment will qualify for the exemption when used by a manufacturer to box, label, fasten, cover or hold the product together for sale.

Since they are not considered manufacturers, retailers, wholesalers, produce shippers and repackagers cannot claim this exemption because they are not changing the physical or chemical attributes of the product but simply repackaging it for sale.

Divergent Use

A manufacturer may use qualifying manufacturing equipment for purposes other than manufacturing for sale. For example, a printing company may use the reproduction equipment to copy office records. Even though divergent use occurs, the manufacturer can issue a valid exemption for qualifying equipment. But the manufacturer must pay tax on the non-exempt use of the equipment.

For equipment purchased four or more years ago, there's no tax on divergent use.

For equipment purchased less than four years ago, tax is based upon the proportion of divergent use, calculated on a monthly basis.

If divergent use during a month is less than 5 percent of the total, no tax is due. If the percentage of divergent use is 5 percent or more, the tax is calculated using the formula:

tax = $1/48$ of purchase price X percent divergent use X tax rate applicable at time of purchase

The percent of divergent use is measured either in hours or by output, using these formulas:

percent divergent use = $\frac{\text{total divergent use hours of operation in the month}}{\text{total hours of operation during the month}}$

OR

percent divergent use = $\frac{\text{total output during divergent use in the month}}{\text{total output during the entire month}}$

Specific Exemptions for Certain Manufacturers

Besides the exemptions available to all manufacturers, additional exemptions are available for certain classes of manufacturers.

Printers and newspaper publishers can claim an exemption for pre-press machinery, equipment and supplies. The exemption covers items such as computers, cameras, film, film developing chemicals, veloxes, plate-making machinery, plate metal, litho negatives, color separation negatives, production art work, and typesetting or composition proofs that are necessary and essential to, and used in connection with, the printing process.

A production company can claim exemption from sales or use tax on the purchase and rental of certain items necessary and essential to, and used or consumed directly in, the production of motion pictures and recordings (both video and audio) that are sold, licensed, distributed, broadcast or otherwise exhibited. Qualifying items include tangible personal property that becomes a component part of the qualifying motion picture, recording or broadcast; cameras, film and film developing chemicals; lights, props, sets, teleprompters, microphones, digital equipment, special effects equipment and supplies, and audio or video routing switchers located in a studio; and certain services and other equipment used in the production. This particular exemption also applies to the production of cable, radio, or television programs.

A semiconductor manufacturer can claim exemption on fabrication cleanrooms and equipment. Qualifying items include all tangible personal property used in connection with the manufacturing, processing or fabrication of semiconductors in a cleanroom environment. A qualifying item can be affixed to or incorporated into realty, and does not have to be actually in the cleanroom. The exemption covers such items as integrated systems, fixtures and piping; property necessary or adapted to reduce contamination or to control airflow, temperature, humidity, chemical purity or other environmental conditions or manufacturing tolerances; and production equipment and machinery. Also qualifying are movable cleanroom partitions and cleanroom lighting, although the exemption does not extend to the building (or its permanent, nonremovable components) that houses the cleanroom.

94-124

(04/2003)



Texas Freeport Exemption

by assessmentadvisors | Apr 9, 2012 | Uncategorized | 0 comments

Texas Freeport Property Tax Exemption

In 1989 Texas voters approved a constitutional amendment giving local property tax jurisdictions the option to exercise or not exercise, their authority to tax specific personal property, otherwise known as freeport goods. The freeport exemption exempts certain types of tangible personal property for taxation, generally inventory, raw material, goods in process, or stored goods in transit. To qualify the property must meet the following criteria:

1. Acquired in or imported into Texas to be forwarded out of state.
2. Detained in Texas for assembling, storing, manufacturing, processing, or fabricating purposes by the person who acquired or imported it.
3. Transported out of state within 175 days after the date the person acquired it, or imported it, into the State of Texas.

Oil, natural gas, and other petroleum products were excluded from eligibility of the exemption and remain taxable.

The application and qualification process is very simple and straightforward. The amount of freeport tax exemption for goods received each year is based on the percentage of qualified freeport goods sold in the previous calendar year. A one page application must be filed with the appraisal district of the county where the goods are located and requests that a company provide information to identify qualified freeport good sold in the previous calendar year. The application must be filed between January 1st and May 1 of each tax year. A late application may be accepted up until roll certification subject to a 10% penalty. Most appraisal districts require documentation be submitted to prove the goods do qualify for the exemption. Companies rely on internal sales reports, customer lists, financial statements etc to meet documentation requirements. The ability to track the goods from acquisition to disposition or shipment out of state is very important.

For example, a company which manufactures oilfield equipment has an inventory value of \$2,000,000 and shipped 70% of their product out of state within 175 days in the previous year would receive an exemption on inventory of 70% for the tax year with jurisdictions that allow the freeport exemption. If the cumulative tax rate for those jurisdictions was 2% the resulting savings would be \$28,000.

If you manufacture, store, sell or distribute goods in Texas and ship out of state you should take advantage of this exemption and take advantage of the significant savings. If the application or documentation process seems daunting or time is an issue Assessment Advisors can help. Our agents have over 20 years experience dealing with freeport exemptions and inventory valuation issues.

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Chapter 313: Attracting Jobs and Investment State Law Aims at Local Development

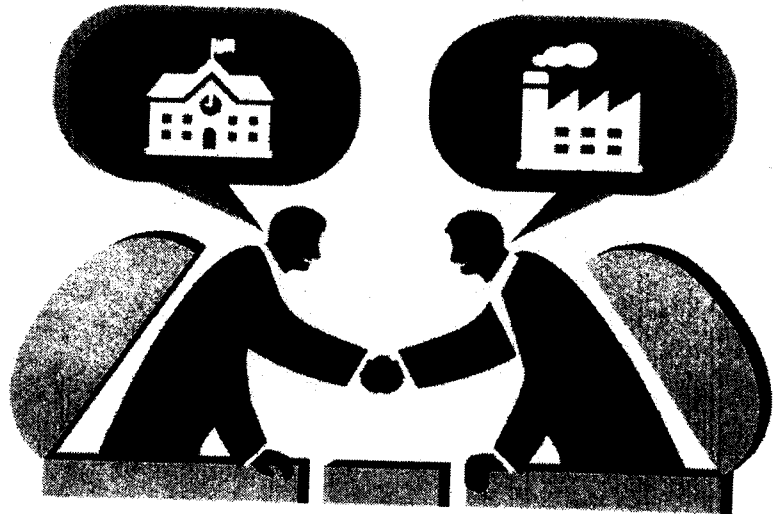
by Olga Garza and Annet Nalukwago

Published April 2016

The 2001 Legislature's **Texas Economic Development Act**, often called "Chapter 313" for its position in the Texas Tax Code, allows public school districts to offer tax incentives for businesses that invest in their communities.

The Chapter 313 incentive is designed to attract new businesses by offering them a 10-year limitation on their appraised property value for a portion of the school district property tax. In exchange for the value limitation, the business agrees to build or install new property and create jobs in the school district.

Most of the local tax revenue the school district forgoes under Chapter 313 is replaced with state funding. Thus the act uses state revenue to promote local economic development.



Chapter 313 was prompted by a growing sentiment among the state's leaders that Texas was becoming less attractive to businesses due to better economic development incentives offered by other states. In 2001, Texas legislators argued it was difficult to entice companies such as Intel and Boeing without competitive property tax incentives.

Over the years, Chapter 313 incentives have been credited with helping to bring a Toyota truck plant to San Antonio and a Samsung semiconductor facility to Austin.

The program isn't without its critics. In 2015, Governor Greg Abbott vetoed legislation to expand Chapter 313 incentives to projects involving multiple, contiguous school districts. The governor's veto stated that, "While the program may sometimes have a positive impact on local economic development, serious concerns exist about its oversight, its transparency, and its value to the taxpayers."

Opponents argue that Chapter 313 produces questionable returns for its investment of tax dollars, with incentives going to businesses that might have established themselves in Texas in any case.

Yet the program has proven popular with legislators. Originally set to expire in 2007, Chapter 313 has been extended three times, with a current expiration date of December 31, 2022.

Since the program's creation, the Legislature has made numerous changes to its requirements. Project eligibility, for instance, has expanded significantly. Other changes have been made to the program's job creation and wage requirements.

How Chapter 313 Works

An *appraised value limitation* is an agreement between a taxpayer and a school district in which the taxpayer proposes to build or install property — and create jobs meeting certain requirements — in exchange for a 10-year limitation on the taxpayer's property value for tax purposes.

For the term of the limitation agreement, the maintenance and operations portion of the property tax isn't levied on property value in excess of the limitation amount. The property remains fully taxable for the other portion of local property taxes, the interest and sinking tax.

Chapter 313 limitation amounts are set in state law and vary from \$10 million to \$100 million in property value. Companies seeking the limitation must submit an application and fee to the school district in which the project will be located.

While Chapter 313 tax limitation agreements are made between individual companies and school districts, the Legislature has charged the Comptroller's office with several duties related to them. Since 2013, the agency has been required to determine whether a proposed project is reasonably likely to generate, within 25 years, enough state taxes and local M&O tax revenue to offset the tax losses due to the limitation agreement. It also must find that the tax limitation is a determining factor in the applicant's decision to invest and build in Texas. School districts cannot enter into Chapter 313 agreements without Comptroller certification.

Under current law, industries eligible for Chapter 313 school property tax limitation include:

- manufacturing
- research and development
- clean coal and other clean energy projects
- renewable electricity generation
- nuclear energy
- computer data centers
- "Texas priority projects" — those with a qualified investment commitment of more than \$1 billion

To be eligible for the tax limitation, a business must create a minimum of 25 "qualifying" jobs in non-rural school districts and 10 qualifying jobs in rural school districts. The statute allows this minimum number of jobs to be waived in certain circumstances, however, and more than half of applicants in fact receive such waivers.

Qualifying jobs must provide certain healthcare benefits, offer the employee at least 1,600 hours of work per year and pay at least 110 percent of the average manufacturing wage for the county or the Council of Governments region in which the district is situated. The average wage of any other jobs created must exceed the county average wage for jobs in *all* industries.

Property Requirements

To qualify for a Chapter 313 property tax limitation, companies are required to make a minimum qualifying investment in the school district in which they seek to locate, varying from \$1 million to \$100 million (**Exhibits 1 and 2**). Minimum property value limitations they can receive in return vary from \$10

million to \$100 million, depending on the school district's taxable property values and whether it is considered a rural or non-rural district.

EXHIBIT 1: NON-RURAL SCHOOL DISTRICT PROPERTY INVESTMENT AND TAX LIMITATION AMOUNTS

Taxable Value of All School District Property	Minimum Qualified Investment	Minimum Tax Limitation Amount
\$10 billion or more	\$100 million	\$100 million
\$1 billion or more, but less than \$10 billion	\$80 million	\$80 million
\$500 million or more, but less than \$1 billion	\$60 million	\$60 million
\$100 million or more, but less than \$500 million	\$40 million	\$40 million
Less than \$100 million	\$20 million	\$20 million

Sources: Texas Tax Code and Texas Comptroller of Public Accounts

EXHIBIT 2: RURAL SCHOOL DISTRICT PROPERTY INVESTMENT AND TAX LIMITATION AMOUNTS

Taxable Value of All School District Property	Minimum Qualified Investment Required	Minimum Tax Limitation Amount
\$200 million or more	\$30 million	\$30 million
\$90 million or more, but less than \$200 million	\$20 million	\$25 million
\$1 million or more, but less than \$90 million	\$10 million	\$20 million
\$100,000 or more, but less than \$1 million	\$5 million	\$15 million
Less than \$100,000	\$1 million	\$10 million

Sources: Texas Tax Code and Texas Comptroller of Public Accounts

Current Agreements: Investments

A 2015 Comptroller report to the Legislature assessed the progress of 259 Chapter 313 agreements. These agreements represented an estimated total investment of about \$123 billion through the entire length of the agreements, and reported investments of about \$59 billion through 2013 (**Exhibit 3**).

EXHIBIT 3: CURRENT TAX LIMITATION AGREEMENTS PROJECTS AND INVESTMENTS

Category	Total Active Agreements	Estimated Total Investment for Length of Agreement	Reported Investment through 2013
Manufacturing	116	\$93,464,080,000	\$42,877,117,000
Research and Development	4	\$835,587,000	\$835,587,000
Renewable Electric Power Generation (Wind)	127	\$24,486,016,000	\$15,249,763,000
Renewable Electric Power Generation (Other)	9	\$1,342,214,000	\$548,988,000
Electric Power Generation (Integrated Gasification Combined Cycle)	1	\$2,848,414,000	\$0

Nuclear Electric Power Generation	2	\$0	\$0
Total	259	\$122,976,311,000	\$59,511,455,000

Note: Other eligible categories have no active projects at this time.
Source: Texas Comptroller of Public Accounts

Current Agreements: Job Creation and Salaries

Manufacturing projects are by far the most important Chapter 313 projects in terms of job creation, accounting for 90 percent of the qualifying jobs created through 2013 (**Exhibit 4**).

EXHIBIT 4: JOB CREATION AND ACTIVE AGREEMENTS BY INDUSTRY, 2003-2013

Project Type	Number of Active Projects	Percentage Share of Job Creation	Share of Active Projects
Manufacturing	116	90%	45%
Research and Development	4	1%	2%
Renewable (Wind)	127	9%	49%
Renewable (Other)	9	0%	3%
Electric Power Generation (Integrated Gasification Combined Cycle)	1	0%	0%
Nuclear	2	0%	1%

Source: Texas Comptroller of Public Accounts

From 2003 through 2013, Chapter 313 applicants executed agreements to create a total of 4,903 qualifying manufacturing jobs with their projects. By 2013, they had greatly exceeded this figure, creating a cumulative total of 8,013 qualifying jobs in manufacturing (**Exhibit 5**).

EXHIBIT 5: CHAPTER 313 MANUFACTURING PROJECTS, 2003-2013 CUMULATIVE NUMBER OF JOBS COMMITTED VERSUS ACTUAL JOBS CREATED

Jobs	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of qualifying jobs promised	10	26	2,107	2,191	2,561	2,917	3,038	3,332	3,623	4,170	4,903
Number of qualifying jobs actually created	54	60	662	2,267	2,921	3,355	3,328	5,147	6,300	6,585	8,013
Number of all new jobs created	54	60	671	2,276	3,024	3,529	3,493	5,281	6,575	6,902	8,308

Source: Texas Comptroller of Public Accounts

In 2013, the average wage for qualifying jobs created by Chapter 313 projects was \$59,451, substantially less than the statewide manufacturing average of \$68,904 (**Exhibit 6**).

Again, though, wages for qualifying jobs under Chapter 313 are determined by the average for manufacturing jobs in the specific county or region at the time of the application, and these areas may pay lower wages than the statewide average. The program, moreover, doesn't require companies with agreements to raise wages during the length of the tax limitation. Furthermore, the 2009 Legislature added a provision allowing projects creating more than 1,000 jobs to pay wages equal to or higher than the county average wage for *all* jobs, rather than manufacturing jobs only. These factors may explain the gap between average Chapter 313 wages and the state average.

EXHIBIT 6: AVERAGE WAGES, CHAPTER 313 JOBS VS. STATE AVERAGE FOR MANUFACTURING, 2007-2013

Jobs	2007	2008	2009	2010	2011	2012	2013
Chapter 313*	\$54,593	\$55,767	\$56,796	\$52,506	\$56,120	\$0,685	\$59,451
Manufacturing, State	60,040	60,489	60,350	63,253	66,017	68,517	68,904

*Note: Agreement holders submit jobs data for publication in the Biennial Progress Report for the Texas Economic Development Act.
Source: Texas Comptroller of Public Accounts and Economic Modeling Specialists Intl.

Reduction in Taxable Values

From 2003 to 2013, the total taxable property value for Chapter 313 projects, without tax limitations, rose from about \$157 million to about \$23 billion. Chapter 313 tax agreements reduced the total taxable property value to about \$5 billion in 2013 (**Exhibit 7**).

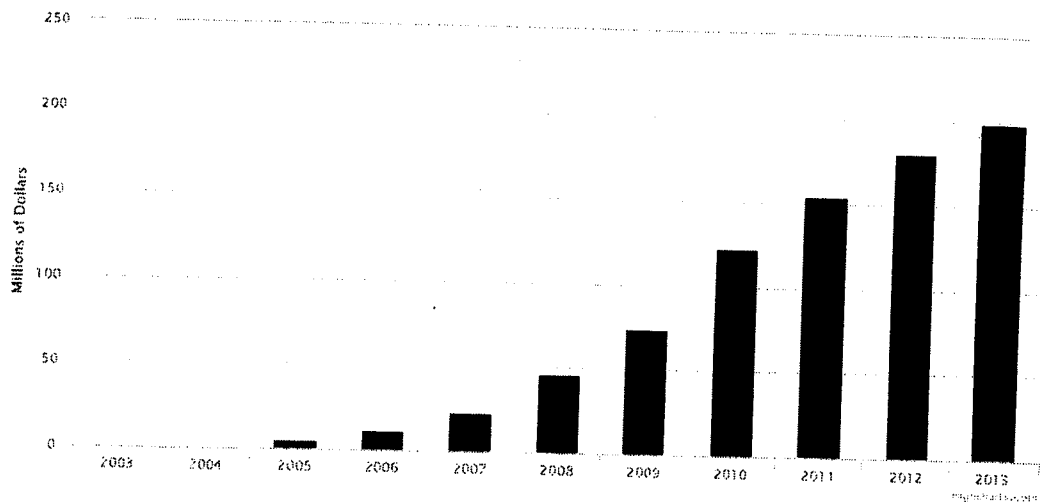
EXHIBIT 7: CHAPTER 313 PROJECTS TAXABLE PROPERTY VALUES 2003-2013

Tax Year	Taxable Property Value Without Tax Limitation	Taxable Property Value With Tax Limitation
2003	\$156,904,000	\$156,904,000
2004	\$427,130,000	\$427,130,000
2005	\$933,392,000	\$570,405,000
2006	\$1,966,874,000	\$1,170,245,000
2007	\$4,399,191,000	\$2,253,999,000
2008	\$7,989,625,000	\$3,783,722,000
2009	\$12,726,138,000	\$6,043,803,000
2010	\$14,712,862,000	\$3,511,411,000
2011	\$16,781,608,000	\$2,878,658,000
2012	\$19,148,488,000	\$2,884,727,000
2013	\$23,126,254,000	\$5,362,144,000

Source: Texas Tax Code and Texas Comptroller of Public Accounts

These tax limitations provided companies with gross tax benefits of \$815 million in the same period (**Exhibit 8**).

EXHIBIT 8: GROSS TAX BENEFIT DUE TO CHAPTER 313 PROJECTS, 2003 - 2013



Source: Texas Comptroller of Public Accounts

Unpredictability

Interest in Chapter 313 continues, with 52 applications received in 2014 and 68 in 2015. Yet so do concerns about the way in which its tax limitations are structured.

The statutory purpose of Chapter 313 is to encourage businesses to invest in Texas and create relatively high-paying new jobs. Proponents of the program assert that providing an early tax incentive to capital-intensive projects ultimately benefits local economies with an increased tax base at the end of the tax limitation period.

One bill introduced in the 2015 legislative session would have amended the Texas Economic Development Act to reclaim the foregone property tax revenue if the market value of the property declines by 20 percent or more during the tax limitation period.

While this provision didn't become law, it highlights a continuing difficulty posed by Chapter 313.

As noted above, state law requires the Comptroller's office to determine whether a proposed Chapter 313 project is reasonably likely to generate enough tax revenue to offset the loss due to the tax limitation within 25 years. Yet economic projections over such a long period are uncertain at best. Economic conditions change; companies and industries rise and fall. Some Chapter 313 projects fail to produce the predicted rise in property values.

Among the 13 projects with tax limitations that ended from 2013 to 2015, actual market values in the last year of the limitation period ranged from 28 percent to 125 percent of the initial market value. While most were within 20 percent of their initial projections, the wide range of values shows the volatility of assumptions made about as-yet-unbuilt projects.

This unpredictability poses an ongoing challenge in assessing the value of Chapter 313. **FN**

To learn more about the Chapter 313 program, search for "Chapter 313" at the top of the page.



Glenn Hegar Texas Comptroller of Public Accounts

Report of the Texas Economic Development Act | 2019

Introduction

In 2001, the Texas Legislature established the Texas Economic Development Act, often called “Chapter 313” for its place in the Texas Tax Code. The Chapter 313 program allows public school districts to offer tax incentives to businesses that make large capital investments and create jobs in Texas communities. The Texas Comptroller of Public Accounts (CPA) administers this program, devoting over 16,000 hours of staff time annually. Chapter 313 is currently set to expire Dec. 31, 2022.

In 2017, there were 311 active agreements and of those, 45 percent were manufacturing and 53 percent were for renewable energy projects. In the 2019 report, there are 383 active agreements, 42 percent are manufacturing and 57 percent are for renewable energy projects. There are 4 research and development projects in both reports.

The Chapter 313 program continues to grow – CPA received in 2016 44 new applications; in 2017 68 new applications; and in 2018 90 new applications.

This report contains information on each of the 383 active agreements made under this chapter as well as aggregate data from these agreements. The information submitted herein is in compliance with Texas Tax Code, Chapter 313.032.

Fort Stockton ISD

Category	Identifier
Application #	135
Name of school district	Fort Stockton ISD
Name of CAD appraising the qualified property	Pecos
Name of company/companies entering into original limitation agreement	SandRidge Energy, Inc.
Name(s) of current agreement-holder(s)	OXY USA Inc.; Pinion Gathering Co., LLC
NAICS code	325120
Statutory eligibility category [313.024(b)]	Manufacturing
Date limitation agreement executed	12/22/2008
First complete year of qualifying time period	2009
First year of 8-year limitation period	2011
Number of qualifying jobs applicant committed to create on application	16
Number of qualifying jobs applicant created through 2017	0
Number of new jobs created through 2017	0
Median wage for new jobs in 2017 (in dollars)	0
Total wages of all new jobs total in 2017 (in dollars)	0
Year in which first new jobs (were/will be) created	2009
Limitation amount (in dollars)	20,000,000
Total qualified investment proposed on application (in dollars)	229,375,000
Qualified investment reported through 2017 (in dollars)	53,691,272
Estimated total investment for length of agreement (in dollars)	30,905,559
2017 market value of qualified property as reported by company (in dollars)	10,412,280
Total property tax (M&O and I&S) in 2017--if no limitation (in dollars)	130,518
Total property tax (M&O and I&S) in 2017--with limitation (in dollars)	119,574

A Report of the Texas Economic Development Act

Fort Stockton ISD

Category	Identifier
Application #	134
Name of school district	Fort Stockton ISD
Name of CAD appraising the qualified property	Pecos
Name of company/companies entering into original limitation agreement	SandRidge Energy, Inc.
Name(s) of current agreement-holder(s)	OXY USA Inc.
NAICS code	325120
Statutory eligibility category [313.024(b)]	Manufacturing
Date limitation agreement executed	12/22/2008
First complete year of qualifying time period	2009
First year of 8-year limitation period	2011
Number of qualifying jobs applicant committed to create on application	35
Number of qualifying jobs applicant created through 2017	16
Number of new jobs created through 2017	16
Median wage for new jobs in 2017 (in dollars)	89,800
Total wages of all new jobs total in 2017 (in dollars)	919,600
Year in which first new jobs (were/will be) created	2009
Limitation amount (in dollars)	20,000,000
Total qualified investment proposed on application (in dollars)	522,000,000
Qualified investment reported through 2017 (in dollars)	842,616,200
Estimated total investment for length of agreement (in dollars)	842,616,200
2017 market value of qualified property as reported by company (in dollars)	265,076,760
Total property tax (M&O and I&S) in 2017--if no limitation (in dollars)	3,322,737
Total property tax (M&O and I&S) in 2017--with limitation (in dollars)	659,887

附件十六

美国路易斯安那州对企业扶持、补贴的有关法令、政策 及企业获补贴情况



LOUISIANA.
Custom-Fit Opportunity.

Incentives Overview

How can Louisiana give your business a competitive edge?

Louisiana offers competitive incentives to help your business thrive. Louisiana Economic Development's team of industry experts ensures a seamless application process to help you determine your company's eligibility.

Economic Incentives for Businesses of All Sizes

COMPETITIVE PROJECTS PAYROLL INCENTIVE

Provides a payroll rebate of up to 15% in target sectors for up to 10 years and either a 4% sales/use tax rebate on capital expenditures or a facility expense rebate equal to 1.5% of qualifying expenses

DIGITAL INTERACTIVE MEDIA AND SOFTWARE INCENTIVE

Provides a 35% refundable tax credit for Louisiana resident labor expenditures and a 25% refundable tax credit on qualified production expenditures

ENTERPRISE ZONE PROGRAM

Provides a one-time \$2,500 tax credit per certified net new job and either a 4% sales/use tax rebate on qualifying expenses or an investment tax credit equal to 1.5% of capital expenditures, excluding tax-exempted items

INDUSTRIAL TAX EXEMPTION

Provides a 100% property tax abatement for up to 10 years on manufacturer's qualifying capital investments

LED FASTSTART*

Provides workforce recruitment, screening and training to eligible new and expanding Louisiana companies at no cost

MOTION PICTURE INVESTOR TAX CREDIT

Provides a tax credit of 30% on qualified production expenditures and an additional 5% tax credit for Louisiana resident labor expenditures

MUSICAL AND THEATRICAL PRODUCTION TAX INCENTIVE

Provides a tax credit of up to 35% on qualified production or infrastructure development expenditures; additional credits available for payroll and transportation expenditures

QUALITY JOBS

Provides a 5% or 6% rebate on annual payroll expenses for up to 10 years and either a 4% sales/use tax rebate on capital expenditures or an investment tax credit equal to 1.5% of qualifying expenses

RESEARCH AND DEVELOPMENT TAX CREDIT

Provides up to a 40% tax credit for Louisiana businesses engaged in employment that conduct research and development activities in Louisiana

RESTORATION TAX ABATEMENT

Provides five-year 100% abatement for the rehabilitation of an existing structure based on assessed valuation of property prior to beginning of improvements

SOUND RECORDING INVESTOR TAX CREDIT

Provides a 25% refundable tax credit on qualified expenditures for sound recording productions

TECHNOLOGY COMMERCIALIZATION CREDIT AND JOBS PROGRAM

Provides a 40% refundable tax credit on costs related to the commercialization of Louisiana technology and a 6% payroll rebate for the creation of new direct jobs

Find Out More.

Louisiana Economic Development
1-800-451-0000
OpportunityLouisiana.com

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LOUISIANA.
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Quality Jobs Program

Quality meets rewards in Louisiana.

The Quality Jobs Program provides a cash rebate to companies that promote economic development by creating well-paying jobs.

Benefits

Provides a 5 percent or 6 percent cash rebate of annual gross payroll for new, direct jobs for an initial five-year term with an option for a five-year renewal. It can also provide a 4 percent sales/use tax rebate on capital expenditures or a 1.5 percent investment tax credit for qualified expenses.

Eligibility

The program is open to businesses that:

- are in bioscience, manufacturing, software, environmental technology, food technology, advanced materials or oil and gas field service
OR
- have at least 50 percent of annual sales out-of-state and/or to in-state customers or buyers if the product or service is resold by the purchaser to an out-of-state customer or buyer or to the federal government
OR
- are located in an area designated by LED as a distressed region.

Process

1. Submit Advance Notification with fee either on LED's website or by mail, then begin the project.
2. File for an Unemployment Insurance ID number with the Louisiana Workforce Commission.
3. Complete the application on LED's website and submit any required addendum material to LED for review.
4. LED reviews application and submits it to the Board of Commerce and Industry.
5. If approved, the Board issues contract through LED.
6. Submit Project Completion Report to LED.
7. File for annual payroll rebate with LED.

Additional Information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit OpportunityLouisiana.com/Quality-Jobs.

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Research and Development Tax Credit

Fostering Innovation.

That's the goal of the Research & Development Tax Credit, which encourages existing businesses with operating facilities in Louisiana to establish or continue research and development activities within the state.

Benefits

Provides up to a 40 percent tax credit on qualified research expenditures incurred in Louisiana – with no cap and no minimum spending requirement. Businesses can also receive up to a 40 percent tax credit under the following programs: Small Business Innovation Research Grant (SBIR) and/or Small Business Technology Transfer (STTR).

Eligibility

The program is open to businesses that have incurred research and development expenditures in Louisiana and meet certain requirements. Only research and development conducted in Louisiana qualifies for the tax credit incentive.

Qualified research expenses may include:

- Wages, subject to withholding, paid to Louisiana resident employees who perform services engaged in research, supervising research or supporting research
- Supplies used in the conduct of research and development
- 65 percent of contract research expenses incurred in Louisiana

Process

1. Complete the application on LED's website and submit the fee and additional required documentation for type of business either online or by mail.
2. LED reviews application.
3. Business notified of approval or denial and Louisiana Department of Revenue is notified.
4. If approved, business files or amends state income tax return and claims the tax credits.
5. Louisiana Department of Revenue issues refund once all state liabilities have been resolved.

Additional Information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit OpportunityLouisiana.com/Research-and-Development

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Industrial Tax Exemption Program

How can Louisiana give your business a competitive edge?

The Industrial Ad Valorem Tax Exemption Program (ITEP) offers an attractive tax incentive for manufacturers within Louisiana. The program abates local property taxes (Ad Valorem) on a manufacturer's new investment and annual capitalized additions related to the manufacturing site.

Benefits

Provides a 100 percent property tax abatement for an initial five-year term with an option for a five-year renewal on manufacturer's qualifying capital investments.

Eligibility

The program is open to businesses classified as a manufacturer or related to the project or the manufacturer. For specific eligibility requirements, contact the Program Administrator or visit OpportunityLouisiana.com/ITEP.

Process

1. Submit Advance Notification with fee either on LED's website or by mail, and then begin the project (if project is \$5 million or less and will take less than 18 months to complete, skip to step 3).
2. File for Louisiana Unemployment ID number (if business does not have one) with the Louisiana Workforce Commission to receive NAICS code.
3. Complete the application on LED's website and submit any required addendum material to LED for review.
4. LED reviews application and submits it to the Board of Commerce and Industry.
5. If approved, the Board issues contract through LED.
6. Submit Project Completion Report and Affidavit of Final Cost to LED.
7. Submit Annual Report to LED.

Additional information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit OpportunityLouisiana.com/ITEP.

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Enterprise Zone Program

How can Louisiana give your business a competitive edge?

Equal opportunity defines the Enterprise Zone (EZ) program. The EZ program provides Louisiana income and franchise tax credits to a business creating new jobs within the state, and hiring at least 50 percent of the new jobs from one of four targeted groups.

Benefits

Provides a one-time \$2,500 job tax credit for each permanent net, new job created and a 4 percent rebate of sales and use taxes paid on materials, machinery, furniture and equipment purchased; or a 1.5 percent refundable investment tax credit on the capital investment.

Eligibility

The program is open to most Louisiana businesses that create permanent, net, new full-time jobs and fill 50 percent of those jobs with employees who meet one or more of the certification requirements: Enterprise Zone residency, public assistance, lacking basic skills and/or unemployable by traditional standards. Retail businesses with a NAICS of 44 or 45 who employ more than 100 employees nationwide, including affiliates, are only eligible to participate in the Enterprise Zone program if they are a grocery store or pharmacy located in an enterprise zone.

Process

1. Submit Advance Notification with fee either on LED's website or by mail, then begin project.
2. Apply for local benefits with local governing authority.
3. File for a Sales Tax Registration Certificate with the Louisiana Department of Revenue and an Unemployment Insurance ID number with the Louisiana Workforce Commission.
4. Complete the application on LED's website and submit any required addendum material to LED for review within 90 days after project completion.
5. LED reviews application and submits it to the Board of Commerce and Industry.
6. If approved, the Board issues contract through LED.
7. Submit Project Completion Report and Affidavit of Final Cost to LED.
8. File for sales and use tax rebate or refundable investment tax credit with the Louisiana Department of Revenue.
9. File Employee Certification Report with LED.

Additional information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit OpportunityLouisiana.com/Enterprise-Zone.

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Tech Commercialization Tax Credit

Louisiana technology, Louisiana jobs.

The Technology Commercialization Tax Credit provides credit for companies that invest in the commercialization of Louisiana technology and create new, direct jobs.

Benefits

Provides a 40 percent refundable tax credit for individuals or businesses that invest in the commercialization of Louisiana technology and a 6 percent payroll rebate for the creation of new, direct jobs.

Eligibility

The program is open to individuals or businesses that invest in the commercialization of Louisiana technology. The technology must be created by a Louisiana business and researched by a Louisiana university or college through a licensing agreement.

Process

1. Complete the eligibility application and submit the fee and all additional documentation either on LED's website or by mail.
2. LED reviews the application and required documentation.
3. The business will be notified of the approval or denial and Louisiana Department of Revenue will be notified.
4. If approved, the business completes a Technology Commercialization application to LED for credits.
5. The business is notified of the amount of tax credits awarded and the Louisiana Department of Revenue is notified.
6. The business amends the Louisiana Department of Revenue tax return to apply the credits.
7. The Louisiana Department of Revenue issues the refund once all Louisiana liabilities have been resolved.

Additional information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit **OpportunityLouisiana.com/Technology-Commercialization**.

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Restoration Tax Abatement Program

Louisiana fosters the preservation of neighborhoods and the revitalization of commercial districts. Property owners are encouraged to enhance existing structures to receive substantial tax savings. Under the Louisiana Restoration Tax Abatement Program, property taxes can be abated on the restoration, improvement, development or expansion of an existing structure located in a qualifying district for five years with a five-year renewal option.

Benefits

Provides five-year property tax abatement with an option for a five-year renewal for the rehabilitation of existing commercial structures and owner-occupied residences based on assessed valuation of property prior to beginning of improvements.

Eligibility

The incentive is open to all Louisiana businesses and homeowners with existing commercial structures and owner-occupied residences to be expanded, restored, improved or developed in qualifying downtown development districts, economic development districts and historic districts, and approved by the local governing authority.

Process

1. Submit Advance Notification with fee either on LED's website or by mail, and then begin the project.
2. Complete the application and submit the fee and all required documentation either online or by mail for LED review.
3. Local governing authority approves application.
4. Board of Commerce and Industry reviews application.
5. If approved, the state executes contracts and mails to the applicant, assessor, local governing body and others, as required.
6. Submit a Project Completion Report to LED three months after completion and an Affidavit of Final Cost to LED six months after completion.

Additional Information

The LED team is ready to assist you with the application process. For more information, FAQs and help with your application, visit OpportunityLouisiana.com/Restoration-Tax-Abatement.

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REVISED 9.19.18

2017 LOUISIANA BOARD OF COMMERCE & INDUSTRY INCENTIVE APPROVALS REPORT

Revised due to changes in program "Totals" listed for the ITE estimated ten year property tax exemption and the EZ total investment.
Individual project data previously reported has not been affected by this revision.



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Enterprise Zone Program										EZ Estimated Sales & Use/Investment Tax Credit		
Application Number	Company Name	Project Parish	Project Description	Project Type	New Jobs	Total Jobs	New Five Year Payroll	Total Five Year Payroll	Total Investment	Project Address	City	NAICS
20141081-EZ	Raising Cane's Restaurants, LLC	Jefferson	Construction and staffing of a new fast food restaurant	Start-Up/New	6	6	\$1,050,000.00	\$1,050,000.00	\$434,715.00	5817 Airline Drive	Metairie	722513
20140953-EZ	Rampart Mixed-Use Complex LLC dba Homewood Suites	Orleans	construction of a hotel	Start-Up/New	52	157	\$12,762,417.00	\$38,565,662.00	\$38,565,662.00	317 N Rampart Street	New Orleans	711110
20150204-EZ	Rouse's Enterprises, LLC	Tangipahoa	Lease and remodel building, purchase equipment, hire employees, operate grocery supermarket	Start-Up/New	65	65	\$15,687,132.00	\$15,687,132.00	\$6,776,559.00	145 Berryland Shopping Center	Ponchartroule	445110
20140985-EZ	RR Hotel Partners, LLC dba Home2 Suites Lafayette	Lafayette	Construction of a hotel	Start-Up/New	30	180	\$4,025,000.00	\$9,867,008.00	\$9,867,008.00	1909 Kalliste Saloom Rd.	Lafayette	721110
20151374-EZ	Ruston Lodging Partners, LLC (Best Western)	Ouachita	Construct a new hotel	Start-Up/New	5	80	\$600,000.00	\$2,475,000.00	\$6,600,000.00	1011 Willow Glen Drive	Ruston	721110
20160050-EZ	Shastri West Monroe, Inc.	Ouachita	construction of new Home2Suites3 by Hilton hotel	Start-Up/New	10	60	\$1,260,000.00	\$3,260,000.00	\$10,000,000.00	500 Marie Street	West Monroe	721110
20141542-EZ	Shaya Restaurant, LLC	Orleans	Starting a new restaurant	Start-Up/New	57	57	\$4,540,000.00	\$4,540,000.00	\$381,000.00	4213 Magazine Street	New Orleans	722511
20130358-EZ	Shintech Louisiana, LLC	West Baton Rouge	Addition and expansion of Polyvinyl Chloride Plant	Addition	5	260	\$1,334,000.00	\$9,084,000.00	\$136,214,866.00	9750 LA Hwy 1 South	Addis	325211
20140994-EZ	Shiv Shakti Lodging, LLC	Calcasieu	new construction of La Quinta Inn & Suites	Start-Up/New	5	45	\$500,000.00	\$1,000,000.00	\$4,500,000.00	1008 Sampson Street	Westlake	721110
20141267-EZ	Shree Laxmi Narayan, LLC	Ascension	Construction of a new hotel	Start-Up/New	14	84	\$1,400,000.00	\$3,850,000.00	\$5,531,610.00	2705 South Outfitter's Drive	Gonzales	721110
20141727-EZ	Slumber Corners Master Tenant, LLC	Orleans	Renovation of old vacant building into a new hotel, creation of new jobs.	Start-Up/New	95	295	\$8,700,000.00	\$13,700,000.00	\$36,905,548.00	1111 Gravier Street	New Orleans	721110
20141279-EZ	Southwest Louisiana Hospital Association	Calcasieu	New Medical ICU , new surgery rooms, ER upgrades, and increased workforce	Expansion	345	2266	\$60,379,250.00	\$156,528,320.00	\$67,397,739.00	1701 Oak Park Blvd.	Lake Charles	622110
20141547-EZ	Southwest Louisiana Hospital Association	Calcasieu	Construction of a two story Urgent Care and Imaging Center consisting of 30,389 square feet/ total space.	Start-Up/New	29	58	\$3,628,000.00	\$5,328,000.00	\$8,796,363.00	4345 Nelson Road	Lake Charles	622110

Industrial Tax Exemption Program											
Application Number	Company Name	Project Parish	Project Description	Project Type	New Jobs	New Jobs Annual Payroll	Total Investment	Project Address	City	NAICS	Estimated Ten Year Property Tax Exemption
ITE-20160660	Air Liquide Large Industries U.S. LP	St Charles	Addition of equipment - Additional Plant Booster	Addition	0	\$0.00	\$6,458,273.00	177 HWY 3142	Taft	325120	\$1,142,146.00
ITE-20170493	Air Products and Chemicals, Inc.	Ascension	Air Products and Chemicals, Inc. will construct, own, and operate a new steam methane reformer on land owned by customer Huntsman for the manufacture and sale of carbon monoxide, hydrogen, and steam to Huntsman and to our Gulf Coast Connection Pipeline customers.	Start-Up/New	7	\$1,100,000.00	\$145,000,000.00	9156 Hwy 75	Geismar	325120	\$23,468,250.00
ITE-20152058	Albemarle Corporation	East Baton Rouge	Various additions to the facility including but not limited to lab renovations, cooler upgrade, and spill containment improvement.	Addition	0	\$0.00	\$4,185,938.00	Gulf States Road	Baton Rouge	325900	\$717,679.00
ITE-20151952	Alliance Compressors, LLC	Natchitoches	Upgrades to existing facilities (only modest this year) and to machinery & equipment used in manufacturing compressors, including some office and other administrative equipment.	Addition	2	\$991,544.00	\$7,042,666.00	100 Industrial Drive	Natchitoches	333415	\$904,278.00
ITE-20141412	Arkema, Inc.	St Charles	Arkema SCO currently controls its process facility using a MOD5 control system leased to Arkema by Dow. The Emerson DeltaV control system, owned by Arkema, must be completely installed prior to December 31st, 2016 as the current license to operate the leased system expires. The new control system is necessary to ensure that the products are made safely, efficiently and per customer/product.	Addition	1	\$90,000.00	\$8,710,329.00	355 Highway 3142	Hahnville	325100	\$1,476,401.00
ITE-20170187	ASH Industries, Inc.	Lafayette	Expansion of production facility to accommodate new customer/product.	Addition	4	\$131,000.00	\$683,570.00	1330 West Willow Street	Lafayette	326199	\$86,745.00
ITE-20160033	Axial, LLC	Iberville	The projects improved safety, reliability and mechanical integrity of the operating units within the Plaquemine site. They were necessary to improve the sites' reliable operation of production units.	Addition	0	\$0.00	\$38,295,113.00	26100 Highway 405	Plaquemine	325211	\$5,974,038.00
ITE-20170138	Bancroft Bag, Inc.	Ouachita	Miscellaneous capital additions in the 425 Bancroft Blvd. location.	Miscellaneous Capital Addition	6	\$16,783,000.00	\$1,196,105.00	425 Bancroft Blvd.	West Monroe	322224	\$169,907.00
ITE-20150261	Barriere Construction Co., LLC	East Baton Rouge	CONSTRUCTION OF NEW PLANT TO PRODUCE HOT MIX ASPHALT	Start-Up/New	8	\$530,000.00	\$9,174,088.00	12601 Scenic Hwy	Baton Rouge	324121	\$1,557,760.00
ITE-20140230	BASF Corporation	Ascension	Improve site's compressed air reliability with two new compressors and a dryer.	Addition	0	\$0.00	\$8,232,583.00	8404 River Road	Geismar	325100	\$1,345,204.00

Industrial Tax Exemption Program											
Application Number	Company Name	Project Parish	Project Description	Project Type	New Jobs	New Jobs Annual Payroll	Total Investment	Project Address	City	NAICS	Estimated Ten Year Property Tax Exemption
ITE-20141393	Shell Chemical Company - Ascension	Ascension	Install facilities to export the ID Unit heavy bleed to the Mobile Site and to Third Parties and convert the heavy bleed heat medium furnace burners to natural gas to make up for lost heat input.	Addition	0	\$0.00	\$4,926,965.00	7594 Hwy 75	Geismar	324110	\$805,066.00
ITE-20141217	Shell Chemical Company - Ascension	Ascension	Substation 2 installation to improve energy efficiency	Addition	0	\$0.00	\$6,663,484.00	7594 Hwy 75	Geismar	324110	\$1,088,813.00
ITE-20131234	Shell Chemical Company - Ascension	Ascension	Phase 1 - Project created a new facility for rail car maintenance activities and rail car certification.	Addition	0	\$0.00	\$5,029,201.00	7594 Hwy 75	Geismar	324110	\$821,771.00
ITE-20141576	Shell Chemical Company, LP	St Charles	New equipment and piping to route new feed to the BD5 unit to produce butadiene.	Addition	0	\$0.00	\$5,580,582.00	15536 River Road	Norco	324110	\$986,926.00
ITE-20130770	Shell Chemical Company, LP	St Charles	Phase 1 of installation of new analyzers in various parts of the chemical plant to replace old obsolete analyzers. Replacement costs have not been retired as part of Phase 1. Those costs will be reflected in Phase 2 (second application).	Addition	0	\$0.00	\$13,091,020	16122 River Road	Norco	324110	\$2,218,930.00
ITE-20141070	Shintech Louisiana LLC	Iberville	Chlor Alkali Plant Expansion	Expansion	11	\$638,627.00	\$147,871,766.00	26270 Highway 405	Plaquemine	325211	\$23,067,995.00
ITE-20143584-ITE	Shintech Louisiana, LLC	West Baton Rouge	PVC Plant and Vinyl Chloride Monomer Plant Expansions	Expansion	6	\$348,511.00	\$135,016,257.00	9750 LA Highway 1 South	Addis	325211	\$17,120,061.00
201303584-ITE	Southern Foods Group, LLC	Tangipahoa	The project involves the renovation of the existing manufacturing operations for Dean Foods located at 4001 US190, Hammond, Louisiana 70401. The renovation includes the investment of over \$7,000,000 in machinery and equipment to the plant in order to effectively produce Dean's product line.	Addition	40	\$1,414,400.00	\$7,269,534.00	4001 US-190	Hammond	311511	\$971,573.00
ITE-20161002	Stolthaven New Orleans, LLC	Plaquemines	This is a Miscellaneous Capital Additions application; therefore, there is not one project but multiple miscellaneous additions that did not fall under either of the existing advance notifications.	Miscellaneous Capital Addition	0	\$0.00	\$1,454,052.00	2444 English Turn Road	Braithwaite	325180	\$142,933.00
ITE-20152032	Stuller, Inc.	Lafayette	One project undertaken in this contract period was that we added a service to provide to our customers with custom imprinted packaging using a hot stamping process. This project included the purchase of some of the modules included in the Pro-Ship software as well as the hot stamping equipment. BlueAlley Tech was also involved in this project to give us capacity to store the various	Addition	30	\$1,352,389.00	\$1,982,006.00	302 Rue Louis XIV	Lafayette	339900	\$242,091.00

Industrial Tax Exemption Program											
Application Number	Company Name	Project Location	Project Description	Project Type	New Jobs	New Jobs Annual Payroll	Total Investment	Project Address	City	NAICS	Estimated Ten Year Property Tax Exemption
ITE-20151157	Surface Performance Group LLC	Jefferson	New plant building and equipment for repair and refurbishment of industrial equipment that provides new surface coating and precision grinding of worn shafts, electric motors, compressors, turbines, and gear shafts	Start-Up/New	7	\$600,000.00	\$2,671,558.00	1209 North Al Davis	Elmwood	33281	\$411,954.00
ITE-20141544	The Bayou Companies, LLC	Iberia	In 2016 The Bayou Companies completed a new high-tech insulation pipe coating facility. This application is for the 1st phase of the new building and purchase of coating equipment to equip the facility.	Start-Up/New	1	\$39,000.00	\$14,197,429.00	4817 Curtis Lane	New Iberia	332812	\$1,471,564.00
ITE-20161527	The Bayou Companies, LLC	Iberia	In 2016, The Bayou Companies extended plant 3 by adding additional space to increase plant capacity. The Bayou Companies also purchased additional powder coating equipment to keep up with increasing product demands.	Addition	0	\$0.00	\$4,608,960.00	5200 Curtis Lane	New Iberia	332812	\$477,719.00
ITE-20141475	Tri-State Industries of Louisiana LLC	Rapides	Equipment and machinery was purchased to provide greater opportunity and flexibility for the production of custom fabricated parts.	Addition	4	\$94,400.00	\$371,233.00	1111 North 3rd Street	Alexandria	332312	\$64,780.00
ITE-20140991	Union Carbide Corporation	St Charles	This project includes the installation of electrical substation facilities 84-30 and 84-31 to meet electrical most effective technology and ESRA requirements. This project will improve reliability and provide the power needs for both existing and future West Water Treatment Plant services.	Addition	0	\$0.00	\$10,746,915.00	Highway 18, River Rd	Taft	325188	\$1,821,602.00
ITE-20150955	Union Carbide Corporation	St Charles	Upgrade Ethylene Oxide Rail Car Loading Rack from pneumatic to electronic control adding a new Distributed Control System building to house the ABB wiring connections.	Addition	0	\$0.00	\$6,736,232.00	Highway 18, River Rd	Taft	325188	\$1,191,303.00
ITE-20151589	Union Carbide Corporation	St Charles	Install electrical substation, associated transformers, motor control centers, power supply feeders and breaker systems in the St. Charles Operations waste water plant. This equipment can be utilized in conjunction with the conversion of the waste water treatment plant to above ground reactors.	Addition	0	\$0.00	\$4,320,869.00	Highway 18, River Rd	Taft	325188	\$764,146.00
ITE-20141263	Union Carbide Corporation	St Charles	To upgrade and reconfigure the electrical distribution system at St. Charles plant by upgrading to current electrical design standards including substation, transformers, transmission lines, relay housing, and switchgear housing.	Addition	0	\$0.00	\$34,495,860.00	Highway 18, River Rd	Taft	325188	\$6,100,593.00
ITE-20161111	Walle Corporation	Jefferson	2015 MCA	Miscellaneous Capital Addition	13	\$325,000.00	\$213,168.00	600 Elmwood Park Blvd.	Harahan	323112	\$32,871.00
ITE-20140297	Westlake Chemical OpCo LP	Calcasieu	Westlake Chemical Corporation is planning to expand the Petro One unit in order to provide additional ethylene to support the existing polyethylene units that Westlake operates. The expected annual average rate for the expansion is 4.2 MMPPD which is equivalent to an annual incremental capacity of 252 MMlbs of ethylene product per year. The main scope of the project is to	Addition	35	\$29,200,000.00	\$460,054,804.00	900 Highway 108	Sulphur	325110	\$74,459,870

Industrial Tax Exemption Program

Application Number	Company Name	Project Description	Project Type	New Jobs	New Jobs Annual Payroll	Total Investment	Project Address	City	NAICS	Estimated Ten Year Property Tax Exemption
20140297A-ITE	Westlake Chemical OpCo LP	Westlake Chemical Corporation is planning to expand the Petro One unit in order to provide additional ethylene to support the existing polyethylene units that Westlake operates. The expected annual average rate for the expansion is 4.2 MWPPD which is equivalent to an annual incremental capacity of 252 MMlbs of ethylene product per year.	Addition	35	\$62,405,454.00	\$13,879,282.00	900 Highway 108	Sulphur	325110	\$627,862.00
ITE-20130803	Westlake Petrochemical LLC	Expansion of Petro 1	Expansion		\$0.00	\$13,704,126.00	900 Hwy 108	Sulphur	325110	\$2,277,626.00
ITE-20131140	Westlake Polymers, LP	POLY 1 A-Line EVA 28% Modification	Addition	0	\$0.00	\$44,475,139.00	900 Hwy 108	Sulphur	325211	\$7,391,768.00
ITE-20151590	Westlake Vinyls Company, LP	Purchase and installation of a new HCL column with reboilers. This project is to maintain operations.	Addition	1	\$122,032.00	\$3,646,020.00	36045 Hwy 30	Geismar	325211	\$590,108.00
ITE-2015468C-ITE	WestRock CP LLC	4504161009 PM Roll Line Rebuild - Have you submitted an Advance for this application? Yes Advance Number 20161468	Miscellaneous Capital Addition	0	\$0.00	\$1,710,200.00	Mill Street	Hodge	322121	\$280,900.00
20161468D-ITE	WestRock CP LLC	4504161010 Central WW Chest - Have you submitted an Advance for this application? Yes Advance Number 20161468	Miscellaneous Capital Addition	0	\$0.00	\$5,252,397.00	Mill Street	Hodge	322121	\$862,706.00
20161468A-ITE	WestRock CP LLC	PM4 Fan Pump Housing - 4504150005 - Have you submitted an Advance for this application? Yes Advance Number 20161468	Miscellaneous Capital Addition	0	\$0.00	\$555,027.00	Mill Street	Hodge	322121	\$83,254.00
ITE-20161468B-ITE	WestRock CP LLC	4504161006 PM4 Vac Blowers PH1 - Have you submitted an Advance for this application? Yes Advance Number 20161468	Miscellaneous Capital Addition	0	\$0.00	\$691,253.00	Mill Street	Hodge	322121	\$103,688.00
20161468B-ITE	WestRock CP LLC	4504161009 PM Roll Line Rebuild - Have you submitted an Advance for this application? Yes Advance Number 20161468	Miscellaneous Capital Addition	0	\$0.00	\$2,621,257.00	Mill Street	Hodge	322121	\$393,189.00
ITE-20170067	WestRock CP LLC	* Rehabilitation of PM5 Wet End Machine and support equipment * Modernization of Mill Equipment to include Woodyard, Sewer Filtration, Soap Recovery, Boilers, Caustic Plant Hot Water System and Mill Lighting Retrofit * Restoration of PM4 Machine and support equipment * Improve plant efficiency to improve capability and cost of	Addition	0	\$0.00	\$150,000,000.00	Mill Street	Hodge	322121	\$24,637,500.00

附件十七

联合国环境规划署

《全球绿色新政——匹兹堡 G20 峰会更新》

(2009 年 9 月)

Global Green New Deal

An Update for the G20 Pittsburgh Summit



September 2009

About UNEP

The United Nations Environment Programme (UNEP) is the overall coordinating environmental organization of the United Nations system. Its mission is to provide leadership and encourage partnerships in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations.

About GEI

www.unep.org/greeneconomy

The Green Economy Initiative (GEI) is designed to assist governments in “greening” their economies by reshaping and refocusing policies, investments and spending towards a range of sectors, such as clean technologies, renewable energies, water services, green transportation, waste management, green buildings and sustainable agriculture and forests.

Greening the economy refers to the process of reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities.

Initially envisioned as a two-year project, the GEI has been expanded to include a number of related UNEP and UN-wide initiatives focused on providing macroeconomic evidence for significantly increasing investments in the environment as a means of promoting sustainable economic growth, decent job creation, and poverty reduction.

About this Update

This update report was completed under the overall direction of Pavan Sukhdev, project leader of the Green Economy Initiative (GEI), with research inputs from Nick Robins, Head of HSBC Climate Change Centre. The update was coordinated at UNEP by Derek Eaton with inputs from Fatma Ben Fadhl, Nicolas Bertrand, Karin Bieri, Moustapha Kamal Gueye, Anna Iturizza, Fulai Sheng, and Benjamin Simmons.

Beyond recovery: Investment and policy reform towards a green economy

In March 2009, South Africa announced that it would put in place a binding climate change policy within three years to cap emission growth by 2020-25. Measures contained in the plan include a regulatory, fiscal and legislative framework that would make tracking and reporting of emissions mandatory.

In September 2009, South Africa released a document entitled, "Green Paper: National Strategic Planning." This policy paper seeks to put in place a planning process that sets out clear long-term energy options, including outlining targets for greenhouse gas emission reductions and targets for the energy intensity of the economy in general. The Green Paper notes that "our understanding of the objectives of society has become more clearly expressed: social, environmental and political dimensions have been added to the economic concept of development"¹⁷. A National Planning Commission will also be established, consisting of independent experts and strategic thinkers, to contribute to mainstreaming the environment in the development process, and to initiating the transition to a green economy.

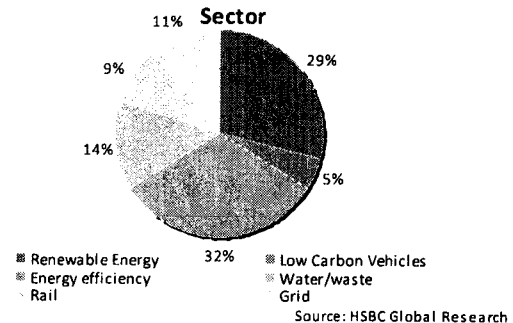
South Africa plans to generate some 15 per cent of its electricity from renewable sources by 2020 and enhance energy efficiency. The South African government is also considering the introduction of a long-term, escalating carbon tax to help curb GHG emissions, particularly from coal-fired power plants. Moreover, in June 2009, the Finance Minister stressed the pursuit of economic stimulus measures with plans for the government and its utilities to spend US\$ 96.7 (787 billion rand) over the next three years building and upgrading infrastructure.¹⁸

United States of America

Green stimulus

Provisions for the United States' stimulus packages are contained in two laws; namely, the Emergency Economic Stabilization Act (EESA) of October 2008 and the American Recovery and Reinvestment Act (ARRA) of February 2009. The EESA includes US\$ 185 billion in tax cuts and credits, including US\$ 18.2 billion for clean energy. The ARRA includes an estimated US\$ 94 billion of "green spending" out of a total of US\$ 787 billion (or 12 per cent), including on energy efficiency, renewable energy, water and waste, mass transit and rail (figure).

United States' Green Stimulus Spending per Sector



In addition, the proposed federal budget for 2010 includes US\$ 4.9 billion to be allocated to a high-speed rail state grant, the Environmental Protection Agency's Clean Water State Revolving Fund and the Drinking Water State Revolving Fund.

Combined, green investments in the two stimulus packages together with those of the proposed budget amount to over US\$ 117 billion, or 12 per cent of the total.

Pittsburgh G20 Summit

A Recovery Accountability and Transparency Board was established to oversee ARRA spending and this information is made available online¹⁹. HSBC estimates that 70 per cent of the green stimulus will be spent over the next four years, with the bulk of spending in 2010 and 2011²⁰. As of July, spending seemed so far to be in line with those expectations²¹.

Beyond recovery: Investment and policy reform towards a green economy

Many of the new US Administration's green priorities are outlined in the proposed 2010 Budget which presents a programme for creating jobs and investing in "long-term economic growth". This includes a proposal to create a "Clean Energy Economy"; a comprehensive energy and climate change plan to invest in clean energy, decrease dependence on oil, address the global climate crisis, and create new jobs²². Some of proposed initiatives, such as using the federal Title XVII Loan Guarantee (of the Energy and Policy Act of 2005) to Reduce Greenhouse Gas Emissions, clearly respond to the call to develop a positive incentive framework for the green economy.

Recent legislative developments include the proposed Waxman-Markey American Clean Energy and Security Act of 2009 (ACESA) which includes a cap-and-trade GHG reduction plan.²³ Combined with the ARRA, this could create an estimated 1.7 million new jobs.²⁴

From green stimulus to sustained growth of the green economy

The review of country experiences with green stimulus packages reveals that much more needs to be done if the G20 is to follow through on its commitment to accelerate the transition to the Green Economy.

UNEP reiterates its Global Green New Deal call, and urges G20 governments to invest US\$ 750 billion of the US\$ 2.5 trillion stimulus package (about 1 per cent of global GDP) towards building a green economy – one that reduces carbon dependency, addresses poverty, generates good quality and decent jobs, maintains and restores our natural ecosystems, and moves towards sustainable consumption.

While UNEP supports the progress that has been made in stimulating a low carbon economy through investments in a range of initiatives such as improved rail transportation, water infrastructure, grid expansion and improved building efficiency, in many cases there remain large gaps between government declarations and practice.

The effectiveness of the green stimulus risks being compromised by delays in the allocation of funds. At the end of the first half of 2009, only around 3 per cent of committed green funds had been disbursed. Moreover, many G20 members have not included sufficient green investments in their overall stimulus packages.

Overall, the amount allocated to renewable energy falls short of the investment needed to reduce carbon emissions and to keep the rise in global average temperature under two degrees Celsius. Some incentives, such as subsidies to the production and consumption of fossil fuels, are working against efforts to build a sustainable future.

Furthermore, while developing countries did not cause the economic and financial crisis, they have been severely affected by it. Development assistance to poor countries has fallen in real terms over the past decade, and millions more vulnerable people will be trapped in poverty this year because of the recession and the effects of climate change, undermining efforts to achieve the Millennium

附件十八

白宫新闻秘书办公室新闻稿

《概况：23 亿美元新清洁能源制造业税金抵免》

（2010 年 1 月 8 日）



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The White House

Office of the Press Secretary

For Immediate Release

January 08, 2010

Fact Sheet: \$2.3 Billion in New Clean Energy Manufacturing Tax Credits

President Obama announced awardees of the clean energy manufacturing tax credit in the American Recovery and Reinvestment Act.

In order to foster investment and job creation in clean energy manufacturing, the American Recovery and Reinvestment Act included a tax credit for investments in manufacturing facilities for clean energy technologies. The Section 48C program will provide a 30 percent tax credit for investments in 183 manufacturing facilities for clean energy products across 43 states.

This tax credit program will help build a robust high technology, US manufacturing capacity to supply clean energy projects with US made parts and equipment. These manufacturing facilities should also support significant growth in US exports of US manufactured clean energy products.

The \$2.3 billion in tax credits is being allocated on a competitive basis. Projects are assessed based on the following criteria: commercial viability, domestic job creation, technological innovation, speed to project completion, and potential for reducing air pollution and greenhouse gas emissions. The Department of Energy also considered additional factors including diversity of geography, technology and project size, and regional economic development.

The program is currently capped at \$2.3 billion in tax credits and was oversubscribed by a ratio of more than 3 to 1, reflecting a deep pipeline of high quality clean energy manufacturing opportunities in the U.S. These tax credits for clean energy manufacturing will help rebuild domestic manufacturing and bring private capital off the sidelines.

With this announcement, IRS has certified applications posted [HERE](#), and notified the certified projects with the approved amount of their tax credit. Awardees will receive acceptance agreements from the IRS by April 16, 2010. Credits will be allocated until the program funding (\$2.3 billion) is exhausted. Subsequent allocation periods will depend on remaining funds.

Estimated Jobs Impact and Timeline of the 48C Manufacturing Tax Credits:

Recovery Act investments of up to \$2.3 billion for advanced energy manufacturing facilities will generate more than 17,000 jobs. This investment will be matched by as much as \$5.4 billion in private sector funding likely supporting up to 41,000 additional jobs.

Timing of Projects:

The statute authorizing the 48C tax credits allows projects that are completed on or after February 17, 2009, when the Recovery Act was signed. Projects must be commissioned before February 17, 2013. The statute favors the selection of projects that are in service early. As a result, some of the selected projects already have been completed and begun operation.

Applicant Pool:

The application deadline for the 48C program was October 16, 2009. Over 500 applications were received with tax credit requests totaling over \$8 billion. The 48C applications pool was distributed across many clean energy technologies and was geographically distributed to more than 40 states.

Qualifying manufacturing facilities included the production of a wide range of clean energy products:

- Solar, wind, geothermal, or other renewable energy equipment
- Electric grids and storage for renewables
- Fuel cells and microturbines
- Energy storage systems for electric or hybrid vehicles
- Carbon dioxide capture and sequestration equipment
- Equipment for refining or blending renewable fuels
- Equipment for energy conservation, including lighting and smart grid technologies
- Plug-in electric vehicles or their components, such as electric motors, generators, and power control units
- Other advanced energy property designed to reduce greenhouse gas emissions may also be eligible as determined by the Secretary of the Treasury.

The statutorily specified review criteria included:

- Greatest domestic job creation (direct and indirect)
- Greatest net impact in avoiding or reducing air pollutants or emissions of greenhouse gases; lowest levelized cost of energy
- Greatest potential for technological innovation and commercial deployment
- Shortest project time from certification to completion

Expanded Support for 48C Tax Credits to Accelerate Manufacturing Job Creation:

Because the 48C program generated far more interest than anticipated, DOE and Treasury have a substantial backlog of technically acceptable applications. Instead of turning down worthy applicants who are willing to invest private resources to build and equip factories that manufacture clean energy products in America, the Administration has called on Congress to provide an additional \$5 billion to expand the program. Because there is already an existing pipeline of worthy projects and substantial interest in this area, these funds will be deployed quickly to create jobs and support economic activity. In doing so, the Administration will employ new approaches to ensure that we maximize private investment for every dollar we invest.



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附件十九

美国聚氯乙烯对外出口统计资料

(作保密处理)

Report Name	20190605134611011400
Report Type	Exports
Reporting Country	United States
Date Range	2018
Frequency	Yearly
Quantity #1	Kilograms
Currency	US Dollar (USD)
Creation Date	05 June 2019 13:46 (Central European Summer Time)
Harmonized Code	Valid from Commodity descriptions
US 3904100000	2017 onwards POLYVINYL CHLORIDE, NOT MIXED WITH ANY OTHER SUBSTANCES

Country Code	Partner Country/region	Total Export value	Total Export quantity 1	Total Export price for quantity 1
404	Canada	448076891	489083417	0.916
720	China (People's Republic of)	274325836	326253558	0.841
412	Mexico	219965735	231767647	0.949
220	Egypt	185155932	223327789	0.829
504	Peru	86880578	99808737	0.87
288	Nigeria	75877489	87201634	0.87
647	United Arab Emirates	73056815	86613224	0.843
664	India	69648800	82320498	0.846
512	Chile	66299095	75029241	0.884
500	Ecuador	62582844	71594173	0.874
480	Colombia	52310551	57734130	0.906
416	Guatemala	50734121	61543119	0.824
052	Turkey	42949582	50171505	0.856
690	Viet-Nam	40361794	48941884	0.825
632	Saudi Arabia	36431834	43948102	0.829
436	Costa Rica	35502097	41269298	0.86
005	Italy	34991505	37938163	0.922
272	Côte d'Ivoire	34376191	41665881	0.825
208	Algeria	33477444	40103837	0.835
456	Dominican Republic	33143430	37460188	0.885
728	Korea (Rep. of)	33140149	39257370	0.844
644	Qatar	28965226	33633747	0.861
017	Belgium	28833562	24072626	1.198
072	Ukraine	27040703	32195501	0.84
212	Tunisia	27032188	33837808	0.799
346	Kenya	26458081	30344321	0.872
649	Oman	25333867	30245631	0.838
276	Ghana	25322460	28303688	0.895
006	United Kingdom	24632706	37116088	0.664
676	Myanmar	23828939	27919503	0.853
662	Pakistan	18164919	21259863	0.854
624	Israel	17916415	20593362	0.87
800	Australia	16521718	19647230	0.841
528	Argentina	15703490	16619399	0.945
669	Sri Lanka	15536886	19211480	0.809
442	Panama	15331729	17838669	0.859
636	Kuwait	14244530	16651698	0.855
508	Brazil	13466321	10678719	1.261
524	Uruguay	12316113	13991009	0.88
076	Georgia	11927655	14468115	0.824
604	Lebanon	11561001	13795649	0.838
010	Portugal	11305711	12893122	0.877
680	Thailand	10868383	9127746	1.191
011	Spain	10782910	12419019	0.868
060	Poland	10365818	14112693	0.735
068	Bulgaria	9941104	11337995	0.877
640	Bahrain	9884963	12073800	0.819
001	France	9804836	11131548	0.881
472	Trinidad and Tobago	9027620	10034538	0.9
701	Malaysia	7767499	9534333	0.815
248	Senegal	7567236	9495150	0.797
804	New Zealand	6651167	8020956	0.829
007	Ireland	6050760	6338702	0.955
009	Greece	5807318	6577817	0.883
388	South Africa	5298187	5835350	0.908
666	Bangladesh	5250125	6014516	0.873
428	El Salvador	4723283	5325846	0.887
302	Cameroon	4398284	5242752	0.839
204	Morocco	4286228	4691227	0.914

520	Paraguay	4165907	4502162	0.925
628	Jordan	3891226	4639317	0.839
216	Libyan Arab Jamahiriva	3489692	3690073	0.946
004	Germany	3465912	3785371	0.916
740	Hong Kong	3248526	2804295	1.158
653	Yemen	3137347	3536886	0.887
706	Singapore	3135587	2680220	1.17
352	Tanzania (United Rep. of)	3010544	3387060	0.889
350	Uganda	2836037	3343380	0.848
260	Guinea	2360570	2669827	0.884
708	Philippines	1989687	2305461	0.863
280	Togo	1977803	2147245	0.921
732	Japan	1730900	968303	1.788
003	Netherlands	1653586	1898171	0.871
091	Slovenia	1642007	758620	2.164
092	Croatia	1478876	1643196	0.9
736	Taiwan	1377049	1863411	0.739
039	Switzerland	1182720	1422735	0.831
484	Venezuela	1121341	1136832	0.986
488	Guyana	1116342	1261676	0.885
232	Mali	1082129	1225000	0.883
077	Armenia	1075985	1223271	0.88
066	Romania	1075754	1154693	0.932
284	Benin	1072068	1342778	0.798
322	Congo (Dem. Rep. of)	904301	1080900	0.837
424	Honduras	893884	908121	0.984
612	Iraq	765276	876611	0.873
268	Liberia	740239	888393	0.833
075	Russian Federation	661151	789800	0.837
625	Occupied Palestinian Territory	612906	691324	0.887
373	Mauritius	592458	681625	0.869
228	Mauritania	571285	631125	0.905
070	Albania	547670	646039	0.848
459	Antigua and Barbuda	474921	512852	0.926
366	Mozambique	453575	520242	0.872
492	Suriname	431038	382008	1.128
370	Madagascar	427517	461500	0.926
314	Gabon	387561	430679	0.9
252	Gambia	373230	419875	0.889
386	Malawi	314710	396000	0.795
334	Ethiopia	304191	531705	0.572
098	Serbia	262841	290225	0.906
240	Niger	255468	311499	0.82
078	Azerbaijan	253378	312500	0.811
391	Botswana	220605	231000	0.955
318	Congo	214660	284250	0.755
421	Belize	184221	56443	3.264
672	Nepal	177598	192250	0.924
700	Indonesia	142742	95192	1.5
432	Nicaragua	135293	85685	1.579
469	Barbados	129422	30116	4.297
453	Bahamas	129180	63085	2.048
024	Iceland	103684	91010	1.139
452	Haiti	99689	164983	0.604
467	St Vincent and the Grenadines	98498	75691	1.301
338	Djibouti	97690	126000	0.775
064	Hungary	84350	40280	2.094
822	French Polynesia	82449	105000	0.785
468	Virgin Islands (British)	80226	4591	17.475
018	Luxembourg	75200	80000	0.94
032	Finland	61102	46750	1.307
306	Central African Republic	58860	72000	0.818
463	Cayman Islands	48007	16539	2.903

378	Zambia	38335	46750	0.82
478	Netherlands Antilles	37401	13147	2.845
413	Bermuda	37073	12338	3.005
247	Cape Verde	34920	36000	0.97
464	Jamaica	33744	10826	3.117
516	Bolivia	30104	46326	0.65
449	St Kitts and Nevis	25406	1844	13.778
660	Afghanistan	24676	1797	13.732
264	Sierra Leone	20020	26513	0.755
474	Aruba	18029	2193	8.221
038	Austria	18029	5015	3.595
473	Grenada	13746	11285	1.218
460	Dominica	12500	10135	1.233
446	Anguilla	6882	4000	1.72
454	Turks and Caicos Islands	5235	2113	2.478
030	Sweden	3726	26	143.308
061	Czech Republic	0	0	0
9999	Total	2594337151	2964908790	0.875

附件二十

保密性证据的非保密性概要

保密性证据的非保密性概要

为了使本案的利害关系方能了解申请人申请保密材料部分的综合信息，申请人特将已申请保密的附件做成非保密性概要。

申请保密的附件四：此附件主要是五家申请企业及十家支持企业提供的生产经营数据，包括申请企业的生产能力、产量、内销量、销售收入、利润、利润率、投资收益率、经营现金流量、开工率、劳动生产率、价格、就业情况、工资总额、库存等数据材料，支持企业的生产能力、产量等数据材料。由于涉及申请人及支持企业的商业秘密，其披露将对申请人及支持企业产生不利影响，特申请予以保密。对于上述情况，申请人及支持企业在《申请书》中披露五家申请企业与十家支持企业及其合计数据的指数及变化幅度区间。

申请保密的附件五：此附件主要是关于全球聚氯乙烯产业概况以及美国聚氯乙烯生产、消费的报告。由于此附件是由有关机构提供的，披露该附件的内容将对资料提供者的正常工作产生不利影响，因此申请人在申请书中在披露全球聚氯乙烯产业概况以及美国聚氯乙烯生产、消费数据的基础上对此附件的其他内容申请保密。

申请保密的附件十九：此附件是美国聚氯乙烯对外出口情况的统计资料。由于此附件是由有关的机构提供的，披露该附件的内容将对资料提供者的正常工作产生不利影响，申请人在披露美国聚氯乙烯对外出口情况的基础上对此附件的其他内容申请保密。