

Statement of Frank J. Macchiarola Senior Vice President, Policy American Petroleum Institute Washington, D.C.

U.S. House of Representatives Committee on Oversight & Reform Subcommittee on Environment April 22, 2021

#### **I. Introduction**

Chairman Khanna, Ranking Member Norman and members of the subcommittee, thank you for the opportunity to testify today. My name is Frank J. Macchiarola, and I am senior vice president of policy, economics, and regulatory affairs at the American Petroleum Institute (API).

API is the national trade association representing America's oil and natural gas industry. Our nearly 600 members - from fully integrated oil and natural gas companies to independent companies - comprise all segments of the industry. API members are producers, refiners, suppliers, retailers, pipeline operators and marine transporters as well as service and supply companies providing much of our nation's energy.

As the United States House Committee on Oversight and Reform, Subcommittee on Environment receives testimony today, it is important to recognize the dual challenge that our society and our industry faces in providing affordable and reliable energy for the world's growing demand, while reducing emissions and addressing the risks of climate change. Additionally, as Congress considers policies offered by the Biden administration, this hearing provides an opportunity to encourage and support approaches that promote investment by the US oil and natural gas industry to revitalize our economy, support employment and continue to meet energy demands in the United States and internationally.

The oil and natural gas industry will continue to play an essential role in the ongoing economic recovery and expansion. Additionally, our industry recently released a climate action framework consisting of policy recommendations for federal government action, industry initiatives being undertaken, and proposals to incentivize lower-carbon options for consumers. We support policies that will continue to facilitate the development of affordable, reliable and sustainable energy and look forward to working with Congress and the Biden administration to achieve these objectives.

<sup>&</sup>lt;sup>1</sup> US Department of the Treasury, "The Made in America Tax Plan" <a href="https://home.treasury.gov/system/files/136/MadeInAmericaTaxPlan\_Report.pdf">https://home.treasury.gov/system/files/136/MadeInAmericaTaxPlan\_Report.pdf</a> April 2021.

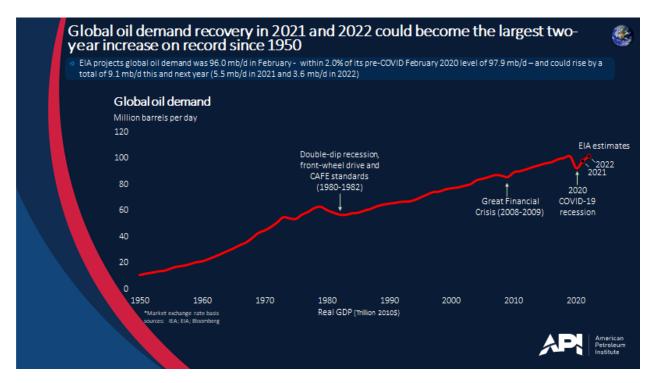


## II. Oil and Natural Gas Industry and the Economic Recovery

While many countries around the world continue to face the negative effects of the COVID-19 pandemic and the public health, social and economic ramifications, it is also evident that increased vaccinations, enhanced mitigation efforts and strong fiscal and monetary policy support provide a clearer and more optimistic outlook for post-pandemic conditions.<sup>2</sup>

As nations emerge from the pandemic, third-party consensus estimates project global real GDP growth of 4.7% year-over-year in 2021, and 4.0% year-over-year growth in 2022.<sup>3</sup> This would equate to the strongest two-year global economic increase on a percentage basis since 1972-1973.<sup>4</sup>

Similarly, the Energy Information Administration (EIA) projects global oil demand could rise by 5.5 million barrels in 2021 and 3.6 million barrels in 2022, the largest two-year increase since 1950.<sup>5</sup> As economies around the world expand and standards of living rise, global consumption of oil and natural gas will continue to increase.



https://www.cbsnews.com/news/jerome-powell-full-2021-60-minutes-interview-transcript/ April 11, 2021.

https://www.eia.gov/pressroom/presentations/AEO2021 Release Presentation.pdf February 3, 2021.

<sup>&</sup>lt;sup>2</sup> Powell, Jerome. Interview with Scott Pelley. 60 Minutes. CBS. Washington D.C.

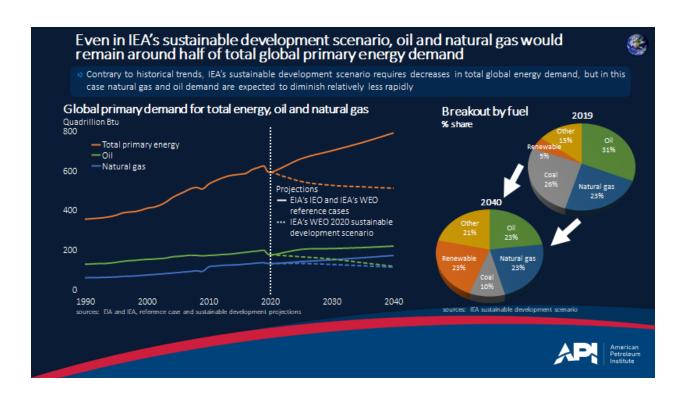
<sup>&</sup>lt;sup>3</sup> American Petroleum Institute, "API Industry Outlook Q1 2021" Note: data for analysis retrieved from IMF and Bloomberg. <sup>4</sup>The World Bank, "GDP Growth (annual %)"

https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2019&start=1961&view=chart .2019.

<sup>&</sup>lt;sup>5</sup> US Energy Information Administration, "Annual Energy Outlook 2021"



Over the next thirty years, global population is estimated to increase by approximately two billion people. With economic expansion and substantial growth in the size of the middle-class, world energy usage is estimated to rise by nearly 50% by 2050, with more than half of that demand coming from oil and natural gas. 7



Even under the International Energy Agency (IEA) Sustainable Development Scenario (SDS), which outlines a major transformation of the global energy system and is fully aligned with the Paris Agreement objectives, oil and natural gas are projected to provide 46% of the world's energy in 2040.<sup>8</sup>

The United States is now the global leader in both CO<sub>2</sub> emission reductions since 2000<sup>9</sup> and energy production<sup>10</sup>, due in large measure to the innovation and vitality of the US oil and natural gas industry. It is essential for our nation's economic strength, energy security and

<sup>&</sup>lt;sup>6</sup> United Nations: Department of Economic and Social Affairs.

https://www.un.org/development/desa/en/news/population/world-population-prospects-2019.html June 17, 2019.

<sup>&</sup>lt;sup>7</sup> US Energy Information Administration, "International Energy Outlook 2019 with projections to 2050" https://www.eia.gov/outlooks/ieo/pdf/ieo2019.pdf September 15, 2019.

<sup>&</sup>lt;sup>8</sup> International Energy Administration, "World Energy Outlook", <a href="https://www.iea.org/reports/world-energy-model/sustainable-development-scenario">https://www.iea.org/reports/world-energy-model/sustainable-development-scenario</a> 2020.

<sup>&</sup>lt;sup>9</sup> UN Climate Change "GHG data from UNFCC" (CO<sub>2</sub> Total w/o LULUCF 2000-2018) https://unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc.

<sup>&</sup>lt;sup>10</sup> US Energy Information Administration, "US Energy Facts Explained" https://www.eia.gov/energyexplained/us-energy-facts/.



environmental stewardship that the US oil and natural gas industry continue to provide a leadership role in powering the global economic recovery and expansion.

The US oil and natural gas industry supports more than ten million American jobs and over seven percent of the overall US economy. Since 2010, cumulative capital investment in the industry exceeded \$2.5 trillion and the average annual salary of oil and natural gas workers is approximately \$108,000, nearly double the national private sector average.

Our industry is poised to help lead the global economic recovery and continue to meet the challenge of providing affordable and reliable energy while addressing the risks of climate change.

## **III.** API's Climate Action Framework

On March 25, 2021 API released its climate action framework (the framework). <sup>14</sup> The framework includes a series of public policies and industry initiatives that provide tangible solutions for policymakers, industry and the public to meet the challenge of climate change.

The framework includes policy recommendations for federal government action, initiatives of the oil and natural gas industry, and proposals to incentivize lower-carbon options for consumers. The framework consists of the following five items:

- 1) <u>Accelerate technology and innovation</u> to reduce emissions while meeting growing energy needs
- 2) Further mitigate emissions from operations to advance environmental progress
- 3) <u>Endorse a carbon price policy</u> by government to drive economywide, market-based solutions
- 4) <u>Advance cleaner fuels</u> to provide lower-carbon choices for consumers
- 5) Drive climate reporting to provide consistency and transparency

#### 1. Accelerate Technology and Innovation

The acceleration of technology and innovation is an essential component of API's plan for climate action. In particular, the deployment of carbon capture, utilization and storage (CCUS), hydrogen and other low and zero-emission technologies hold significant promise for reducing emissions while meeting future energy demand. Private investment and federal government spending can help accelerate the advancement of these important technologies.

<sup>&</sup>lt;sup>11</sup> PWC, "Impacts of the Natural Gas, Oil and Petrochemical Industry on the US Economy in 2018" May 2020.

<sup>&</sup>lt;sup>12</sup> Xu, Conglin, Oil and Gas Journal, Annual Spending Report, "Where Funds Will Go For US Projects," (2013 to 2020) Radler, Marilyn, Oil and Gas Journal, Annual Spending Report "Where Funds Will Go For US Projects" (2010 to 2012)

<sup>&</sup>lt;sup>13</sup> US Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

<sup>&</sup>lt;sup>14</sup> American Petroleum Institute, "Climate Action Framework" March 2021. <a href="https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf">https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf</a>.



While CCUS is not an oil-and-gas specific technology, it offers a pathway for sources that are difficult to abate to capture or offset emissions, while also offering the potential to lower the carbon profile of oil and natural gas production through CO<sub>2</sub>-enhanced oil recovery (EOR) with permanent geologic storage.

In the IEA SDS for the World Energy Outlook 2020, CCUS accounts for nearly 15% of the cumulative reduction in emissions compared with the Stated Policies Scenario. <sup>15</sup> And, the United Nations Intergovernmental Panel on Climate Change (IPCC) concluded that the costs of achieving atmospheric CO<sub>2</sub> levels consistent with the Paris Agreement would be more than double without CCUS. <sup>16</sup>

The United States is the world leader in the deployment of CCUS technology. The US has twelve commercial-scale carbon capture facilities in operation, with the capacity to capture on the order of twenty-five million metric tons (MMT) of CO<sub>2</sub> annually.<sup>17</sup> An additional twenty-two carbon capture facilities are in various development stages in the US including those already under construction.<sup>18</sup>

The growth of the global hydrogen economy also presents the opportunity for natural gas to play an increased role in decarbonization efforts. A recent report from McKinsey estimates that in the US alone, new market segment demands for hydrogen, driven by decarbonization efforts, could make hydrogen account for 14% of total final energy demand by 2050. This is roughly equivalent to 8.4 trillion cubic feet of gas.<sup>19</sup>

Recognizing the potential for low-carbon hydrogen in decarbonization, many governments have recently released hydrogen roadmaps, including Canada, South Korea, Japan, and the European Union that center on both production and use.<sup>20</sup>

While technical barriers remain with respect to the scaling-up of hydrogen in new segments, especially infrastructure constraints, many gas and electric utilities are proceeding with integrating hydrogen into their existing natural gas infrastructure and generation fleet. There is also a growing list of state and federal proposals addressing technical and market barriers to hydrogen use in the United States consistent with increased industry support for the market.

<sup>&</sup>lt;sup>15</sup> International Energy Administration, "Energy Technology Perspectives 2020" <a href="https://www.iea.org/reports/energy-technology-perspectives-2020">https://www.iea.org/reports/energy-technology-perspectives-2020</a>. September 2020.

<sup>&</sup>lt;sup>16</sup> Intergovernmental Panel on Climate Change, Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp. 2014.

<sup>&</sup>lt;sup>17</sup> Global CCS Institute. "Facilities Database" 2020.

<sup>&</sup>lt;sup>18</sup> Global CCS Institute. "Facilities Database" 2020.

<sup>&</sup>lt;sup>19</sup>McKinsey & Company, "Road Map to a US Hydrogen Economy"

https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5e7ca9d6c8fb3629d399fe0c/1585228263363/Road+Map+to+a+US+Hydrogen+Economy+Full+Report.pdf, Pp. 9 2020.

<sup>&</sup>lt;sup>20</sup> Patel, Sonel., *Countries Roll Out Green Hydrogen Strategies, Electrolyzer Targets*" POWER. https://www.powermag.com/countries-roll-out-green-hydrogen-strategies-electrolyzer-targets/. February 1, 2021.



To further accelerate the development and deployment of CCUS, hydrogen and other low and zero-emission technologies, API supports:

- The full funding for low carbon research development and deployment programs authorized in the Energy Act of 2020.
- Substantial increases in appropriated funding for government research on low or zerocarbon technologies, including capturing and storing carbon, and production and supply of hydrogen, with a formal assessment of funded technologies on the basis of potential for GHG abatement at the lowest cost.
- Implementation of federal policies consistent with the National Petroleum Council's 2019 report "Meeting the Dual Challenge: A Roadmap to At-Scale Deployment of Carbon Capture, Use, and Storage" to substantially increase support for CCUS to achieve "atscale phase" deployment.
- Implementation of policies to expand the infrastructure required to advance these low and zero-emission technologies.

## 2. Further Mitigate Emissions from Operations

The oil and natural gas industry recognizes the importance of reducing emissions from operations and is prioritizing continuous efforts in this regard across the value chain. The components of this section of the climate action framework include policies and industry initiatives on methane emissions and flaring as well as downstream refinery emissions.

*Methane*: The oil and natural gas industry has made significant progress in reducing methane emissions. Methane emissions account for approximately 10% of total US greenhouse gas emissions on a carbon dioxide-equivalent basis. <sup>22</sup> Among methane sources, oil and natural gas production, processing, and transmission contribute approximately 30% of anthropogenic emissions in the US. <sup>23</sup> From 1990-2019, methane emissions from natural gas systems declined 16% while production increased by 90% - effectively a 55% decline in the rate of emissions. <sup>24</sup> Emission trends relative to production continue to trend downward in key basins.

<sup>&</sup>lt;sup>21</sup> National Petroleum Council, "Meeting the Dual Challenge A Roadmap to At-Scale Deployment of Carbon Capture, Use, and Storage" https://dualchallenge.npc.org/downloads.php. 2020.

<sup>&</sup>lt;sup>22</sup> US Environmental Protection Agency, "Overview of Greenhouse Gases" <a href="https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane">https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane</a>.

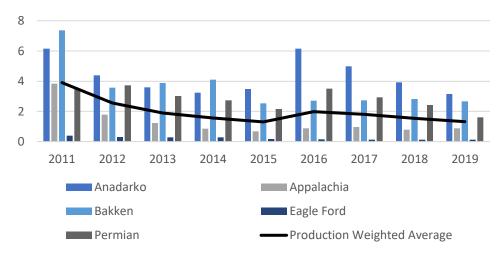
<sup>&</sup>lt;sup>23</sup> US Environmental Protection Agency, "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019" https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019.

<sup>&</sup>lt;sup>24</sup> US Environmental Protection Agency, "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019" https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019; EIA, "March 2021 Monthly Energy Review, Table 4.1" March 25, 2021. <a href="https://www.eia.gov/totalenergy/data/monthly/pdf/sec4\_3.pdf">https://www.eia.gov/totalenergy/data/monthly/pdf/sec4\_3.pdf</a>; and API calculation.



# Falling Methane Rates in Natural Gas Production from Key Basins

Metric tons CO<sub>2</sub> equivalent per million cubic feet produced



To build on this progress, the oil and natural gas industry continues to take action in prioritizing methane emissions reductions. In December of 2017, API announced the formation of The Environmental Partnership (TEP), an initiative of the US oil and natural gas industry.

TEP's mission is to continuously improve the industry's environmental performance by taking action, learning about best practices and technologies, and fostering collaboration in order to responsibly develop our nation's essential natural gas and oil resources.

Since its inception, participation in TEP has grown from twenty-six participating companies to ninety oil and natural gas companies. TEP is implemented in seventeen of the twenty-one top-producing states, with nineteen of the top twenty US natural gas producing companies participating.

TEP has developed six environmental performance programs to address key emission sources including: increasing leak detection and repair, phasing out high-bleed pneumatic controllers, improving the manual liquids unloading process, reducing emissions from compressors and pipeline blowdowns, and minimizing flaring of associated gas.

The following represents TEP activity in three environmental performance programs in 2019:<sup>25</sup>

*Increasing Leak Detection and Repair:* 

• More than 87,000 sites surveyed

<sup>&</sup>lt;sup>25</sup> The Environmental Partnership, "Annual Report 2020"



- More than 116 million component inspections performed
- More than 184,000 surveys conducted
- 0.08% leak occurrence rate, or less than one component leaking in 1,000

#### Prioritizing Equipment Improvements:

- More than 10,500 additional gas-driven controllers replaced or removed from service
- More than 3,300 high-bleed pneumatic controllers replaced, retrofitted, or removed from service
- More than 2,800 zero-emission pneumatic controllers installed at new sites
- 43 participating companies no longer have high-bleed pneumatic controllers in their operations

#### *Improving the Manual Liquids-Unloading Process*

• Emissions minimized by monitoring more than 44,000 manual liquids-unloading events

The oil and natural gas industry is committed to the development and deployment of new technologies and practices through industry initiatives, like TEP, to better understand, detect, and mitigate emissions.

In addition to industry initiatives, API supports cost-effective policies and direct regulation that achieve methane emission reductions from new and existing sources across the supply chain.

*Flaring*: Oil and natural gas producers have reduced emissions associated with flaring, both voluntarily and under federal and state regulations. The oil and natural gas industry can further improve current practices and reduce emissions while also minimizing natural resource loss from flaring of associated gas that occurs during production.

To reduce emissions associated with flaring, operators are increasingly aligning production, gasgathering and processing infrastructure to provide environmental benefits and conserve resources. The industry is identifying alternative beneficial uses of associated gas to prevent flaring where gas-gathering infrastructure is unavailable.

In 2020, TEP announced the creation of the Flaring Management Program to foster industry collaboration through: advancing best practices to reduce flare volumes, promoting the beneficial use of associated gas, improving flare reliability and efficiency, and collecting data to calculate flare intensity and reporting actions taken to be aggregated annually by TEP.

In addition, API developed Standard 537, *Flare Details for Petroleum, Petrochemical, and Natural Gas Industries*, which provides guidance and good engineering practices for the selection, design, operation and maintenance of flares, and is applicable across the oil and natural gas industry. The standard incorporates the newest technology for combustion equipment to improve design and operation of the flaring processes, ultimately helping to reduce flaring and emissions.



Refining GHG Emissions Reduction Initiative: Refineries are working to reduce GHG emissions and drive energy efficiencies. Many refiners provide data to third parties on their energy efficiency and carbon emissions intensity to track performance and identify opportunities for improvements. API is currently evaluating a potential coordinated refinery carbon emissions reduction program as part of its climate action framework. This program would be available to all refineries and would seek to identify an achievable target that will result in meaningful GHG emissions reductions. Participating companies will report their performance to API annually through a third-party organization, and API will conduct industry forums to share information as appropriate on topics such as refinery carbon emissions reductions and overall refinery energy efficiency.

## 3. Endorse a Carbon Price Policy

API supports well-designed, market-based, economy-wide carbon pricing as the most impactful government climate policy instrument to reduce CO<sub>2</sub> emissions while helping keep energy affordable, instead of mandates or prescriptive regulatory action.

As policymakers consider various policies and approaches to address the risks of climate change, API will continue to engage based upon its our industry-established climate principles<sup>26</sup> and issue specific framework<sup>27</sup> on carbon pricing and work to integrate legislation that prices carbon across sectors and political jurisdictions while avoiding duplication.

Establishing an economy-wide, government carbon pricing policy would provide transparency to consumers and drive technology innovation to address the risks of climate change. It is also important that such a policy avoid carbon "leakage" and ensure US competitiveness. This aspect, along with global carbon markets as envisioned by global carbon markets in Article 6 of the Paris Agreement would support addressing innovation and climate change beyond US borders.

#### 4. Advance Cleaner Fuels

The oil and natural gas industry is advancing cleaner fuels to provide consumers with lower-carbon options. On both electricity/natural gas policy and transportation fuels policies, the federal government can take steps to enhance progress on emissions reductions in the US and promote US LNG exports to help reduce emissions globally.

*Electricity/Natural Gas*: The US has an abundant supply of natural gas that continues to help lower emissions while providing an affordable and reliable fuel source.

Over the past decade, electricity generation has been the largest source of demand growth for domestically produced natural gas. Power sector natural gas demand increased more than 110%

<sup>&</sup>lt;sup>26</sup> American Petroleum Institute, "Climate Action Framework." <a href="https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf">https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf</a>. March 2021.

<sup>&</sup>lt;sup>27</sup> American Petroleum Institute, "Climate Action Framework." <a href="https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf">https://www.api.org/-/media/Files/EHS/climate-change/2021/api-climate-action-framework.pdf</a>. March 2021.



between 2007-2019 to comprise approximately 36% of total consumption in 2019.<sup>28</sup> The concurrent fuel-switching from coal to natural gas has been the primary factor in emissions reductions in the United States. In 2018, coal to natural gas switching avoided ninety-five megatons of CO2 emissions globally.<sup>29</sup>

As the US considers energy and environmental policies, it must take into account the important role that natural gas plays in both strengthening our energy security and reducing emissions. API supports market policies that recognize and value the many unique attributes of natural gas as a power generation source, including its dispatchability and its flexibility in pairing with rising levels of variable renewable energy generation.

*Transportation Fuels*: Emissions from vehicles have been reduced significantly due to cleaner burning fuels and advancements in the internal combustion engine. In fact, many of today's automobiles are 99% cleaner than they were in 1970.<sup>30</sup>

Assuming existing policies, EIA projects CO<sub>2</sub> emissions from light duty vehicles are projected to decline over the next two decades as the newer and more fuel-efficient vehicles replace less efficient vehicles in service.<sup>31</sup>

The oil and natural gas industry is evaluating future transportation fuels policy options to identify policies that reduce the downstream segment's carbon impact. In particular, API supports technology neutral, market-based federal policies that drive cost-effective GHG emission reductions in the transportation sector using a holistic (i.e., lifecycle basis) approach that includes fuels, vehicles and infrastructure systems.

# 5. <u>Drive Climate Reporting</u>

The reporting of GHG emissions is essential for the inventories that underpin climate policymaking, the tracking of regulatory compliance, and countries' global climate commitments. The reporting of GHG emissions also drives carbon markets, which continue to mature and proliferate. And companies' reporting on GHGs and climate risks and opportunities continues to grow in importance for stakeholders, especially the financial sector.

API supports accurate data on GHG emissions from all emitting sectors to ensure widespread confidence in government GHG policy. API believes that the measurement and reporting of GHG emissions should be timely, accurate, relevant, and transparent because the data are used as a basis for government policy and potentially in market-based mechanisms.

<sup>&</sup>lt;sup>28</sup>US Energy Information Administration, "Natural Gas Explained" <a href="https://www.eia.gov/energyexplained/natural-gas/use-of-naturalgas.php#:~:text=The%20electric%20power%20sector%20uses,power%20sector's%20primary%20energy%20consumption.">https://www.eia.gov/energyexplained/natural-gas/use-of-naturalgas.php#:~:text=The%20electric%20power%20sector%20uses,power%20sector's%20primary%20energy%20consumption.

<sup>&</sup>lt;sup>29</sup>International Energy Administration, "Global Energy & CO2 Status Report 2019" <a href="https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions">https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions</a> 2019.

<sup>&</sup>lt;sup>30</sup> US Environmental Protection Agency, "History of Reducing Air Pollution from Transportation in the United States." <a href="https://www.epa.gov/transportation-air-pollution-and-climate-change/accomplishments-and-success-air-pollution-transportation 2020">https://www.epa.gov/transportation-air-pollution-and-climate-change/accomplishments-and-success-air-pollution-transportation 2020</a>.

<sup>&</sup>lt;sup>31</sup>US Energy Information Administration, "Annual Energy Outlook 2021".2021.



Acknowledging the importance of accurate estimation of GHG emissions, API is updating the *API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry* (Compendium). The Compendium has provided the industry with reliable guidance since 2001, and the 2021 update will be the first since 2009. In light of significant work by the industry, academia and the government, API, its members, and other stakeholders are updating the Compendium to ensure that the industry is using the most up-to-date and credible data, emission factors, and procedures for calculating greenhouse emissions from operations.

The 2021 Compendium will update several source categories and include an expansion of methodologies for LNG and CCUS, which were not prominent within the Compendium previously. The Compendium is referenced by EPA and globally by other government agencies and voluntary reporting frameworks in addition to being used widely by companies for their GHG reporting.

API is also establishing a Climate-related Reporting Initiative to develop a concise template of core GHG indicators to enhance consistency and comparability in sustainability reporting.

## IV. Support for the Oil and Natural Gas Industry

As Congress and the Biden administration assess policies to meet our environmental and energy challenges, it is essential to consider the effects such policies will have on US competitiveness and on our ability to continue to meet the dual challenge discussed within this testimony. One important subject matter for consideration of these factors is federal taxation.

The nature of the federal tax code is to allow for the deduction of current costs from businesses receipts and sales to generate a net income amount that is subject to the corporate tax. Of course, it is never that simple a calculation and there are several different provisions and statutory determinations in the code accounting for the economic structure of the various industries in our economy. One area of the economy that has a specific focus in the tax code are businesses involved with natural resources.

Generally, provisions covering natural resources recognize the need to recover the costs associated with various investments, in order to support reinvestment into the business. Extraction of resources are important for the raw materials that support our economy and policy direction to develop these domestically is included in the tax statutes. Most of the provisions are in the form of current deductions for the recovery of payments for equipment, labor and non-salvageable costs of current operations. These cost recovery mechanisms are not subsidies, but rather, common tools that allow businesses to grow, invest, and create jobs. Further, unlike tax credits that reduce a tax obligation outright, they do not affect how much our industry pays in taxes, but rather the timing of such payment.

Provisions that allow for the recovery of drilling costs in the year spent or lease investment through depletion may seem unique, but they are consistent with treatment found in other



provisions of the code. For example, many industries are now able to claim immediate recovery of qualifying capital investments through the application of bonus or accelerated depreciation.

Accelerated deductions are also available for costs such as research and development. In addition, the depletion deduction (cost or percentage) is applicable to all extractive industries including timber, clay, gold, coal and a host of other materials – though there are significant restrictions on the use of percentage depletion by oil and gas taxpayers.<sup>32</sup>

Many US oil and natural gas companies operate globally as well as domestically. The oil and natural gas industry establish businesses where the resource is located and, as a result, the industry is often a significant employer for local populations as well as substantial contributors to national budgets. By being required to establish operations where resources are located, companies are often exposed to host-country rates that exceed US tax rates. However, residual profits from those projects are returned to the United States and often invested directly or indirectly in the US economy.

Even prior to tax reform, US-based oil and natural gas companies returned billions in overseas income<sup>33</sup> and supported high-paying jobs such as geologists, structural engineers, petroleum engineers, accountants, and other professions that are critical to those projects.

These investments and the oil and natural gas industry, in general, provide significant revenues to the federal and local governments. In 2019, the Department of the Interior (DOI) disbursed nearly \$12 billion<sup>34</sup> generated from energy production on federal lands and waters to the U.S. Treasury and state governments. Over the past decade, DOI has disbursed on average \$10 billion<sup>35</sup> annually and provides most of the support for the federal Land and Water Conservation Fund.

In addition, excise taxes placed on our products provides significant revenues for federal and state infrastructure projects. In 2019, federal fuel taxes generated over \$36 billion in revenues for the highways, bridges and other structures that allow our economy to operate efficiently.<sup>36</sup>

At the state level, in 2019 the industry generated over \$14 billion<sup>37</sup> for state treasuries through severance taxes that communities around the country used to fund schools, infrastructure, and other critical social services. For example, revenues from oil and gas companies contributed nearly 39% or \$3 billion<sup>38</sup> of New Mexico's annual budget in 2019. That \$3 billion was

32 I.N.C. 9 013A

<sup>32</sup> I.R.C. § 613A

<sup>&</sup>lt;sup>33</sup>U.S. Internal Revenue Service, "Statistics of Income, Corporate Foreign Tax Credit Table 1."

<sup>&</sup>lt;sup>34</sup> U.S. Department of the Interior, "Natural Resources Revenue Data" <a href="https://revenuedata.doi.gov/query-data/?dataType=Disbursements">https://revenuedata.doi.gov/query-data/?dataType=Disbursements</a>

<sup>&</sup>lt;sup>35</sup> U.S. Department of the Interior, "Natural Resources Revenue Data" <a href="https://revenuedata.doi.gov/query-data">https://revenuedata.doi.gov/query-data</a>

<sup>&</sup>lt;sup>36</sup> U.S. Internal Revenue Service, "Statistics of Income, Federal Excise Taxes or Fees Reported to or Collected by the Internal Revenue Service, Alcohol and Tobacco Tax and Trade Bureau, and Customs Service"

<sup>&</sup>lt;sup>37</sup> U.S. Census Bureau. 2020.

<sup>&</sup>lt;sup>38</sup> New Mexico Oil and Gas Association, "Fueling New Mexico The Impact of New Mexico's Oil & Natural Gas Industry." 2020. https://d3n8a8pro7vhmx.cloudfront.net/nmoga/pages/849/attachments/original/1579190543/NMOGA\_fuelingnewmexico202 0.pdf?1579190543



distributed across the entire state to fund a wide variety of budget measures including almost half of the state budget for local school districts.<sup>39</sup> Furthermore, over \$50 billion was collected in 2019 in state fuel taxes to supplement projects throughout the country.<sup>40</sup>

The oil and natural gas industry is a major contributor to job creation and investment in our communities and supports more than ten million US jobs. Direct industry jobs pay nearly double the national private sector average. And every direct industry job supports an additional 2.7 jobs in affiliated industries, from lodging to restaurants within proximity of our operations.<sup>41</sup>

In 2015 our industry's total effect on labor income was \$714.2 billion, or 6.7% of national labor income and its total effect on U.S. GDP was \$1.3 trillion, accounting for 7.6% of the national total.<sup>42</sup>

Over the course of the pandemic, the federal government has mobilized unprecedented resources to support the nation and the economy. The substantial, bipartisan legislation passed to address the challenges presented by COVID-19 were targeted in some instances to discrete areas, but generally employed levers that sought to stabilize the broader economy.

Successful programs such as the Paycheck Protection Program and the Main Street Lending Program provided funding to businesses to meet payrolls and broader stability into the system. Other aspects included tax provisions that benefitted industry broadly and had been incorporated in previous legislation passed during the Great Recession and to assist in the economic recovery in 2002.<sup>43</sup> While neither the subject of specific benefits or targeted restrictions, companies in the oil and natural gas industry applied for these support mechanisms and, along with so many other companies and industries helped mitigate the potential economic crisis by maintaining employment levels and supporting local communities.

<sup>&</sup>lt;sup>39</sup> New Mexico Oil and Gas Association, "Fueling New Mexico The Impact of New Mexico's Oil & Natural Gas Industry." 2020. https://d3n8a8pro7vhmx.cloudfront.net/nmoga/pages/849/attachments/original/1579190543/NMOGA\_fuelingnewmexico202 0.pdf?1579190543

<sup>&</sup>lt;sup>40</sup>Federal Highway Administration, "State Motor Fuel Tax Receipts 1961-2019, MF-201, Highway Statistics 2019" 2019.

<sup>&</sup>lt;sup>41</sup> PWC, "Impacts of the Natural Gas, Oil and Petrochemical Industry on the US Economy in 2018" May 2020.

<sup>&</sup>lt;sup>42</sup> PWC, "Impacts of the Natural Gas, Oil and Petrochemical Industry on the US Economy in 2018" May 2020.

<sup>&</sup>lt;sup>43</sup> Congressional Research Service, "COVID-19: Potential Role of Net Operating Loss (NOL) Carrybacks in Addressing the Economic Effects" March 16, 2020.



## **V.** Conclusion

As the United States emerges from the COVID-19 pandemic, and economies continue to recover and expand, global demand for energy is projected to increase. The US oil and natural gas industry is positioned to continue in a leadership role in providing affordable and reliable energy to lift standards of living, while meeting the challenge of addressing the risks of climate change.

In short, our industry works every day to deliver energy, and improve lives by giving people the essentials they need, and the conveniences that help them thrive. We work to strengthen local economies and partner with academia, data scientists, innovators, and governments, to pioneer a brighter future where access to energy and opportunity is within reach for all.

Continually evolving and responding to energy realities with lower carbon solutions, the oil and natural gas industry is positioned to meet the world's evolving energy needs and address the environmental challenges of our time. We will continue growing and adapting. Our workforce consists of engineers, scientists, data analysts, and many other highly skilled experts, collaborating to solve these great challenges.

As a result of the ingenuity and vitality of the oil and natural gas industry, the United States has reduced its dependence on foreign sources of oil, thus producing a geopolitical paradigm shift. In 2019, the US became a net exporter of total energy for the first time in nearly seventy years.<sup>44</sup>

Today the world faces the challenge of addressing the risks of climate change, and American natural gas offers a solution to reduce global emissions just as it has brought US emissions to generational lows.

It is essential that policymakers implement effective and achievable measures that facilitate advancements in reducing emissions, while supporting America's economy, employment and energy security. Recent history proves that economic growth and emissions reductions do not have to be mutually exclusive and with effective policy support, the United States can continue to make progress on these important priorities.

We look forward to working with policymakers in Congress, the Biden administration and at every level of government to help shape and advance these priorities. Thank you for the opportunity to testify today and I look forward to your questions.

<sup>&</sup>lt;sup>44</sup> US Energy Information Administration, "US Total Energy Exports Exceed Imports in 2019 for the First Time in 67 Years" <a href="https://www.eia.gov/todayinenergy/detail.php?id=43395">https://www.eia.gov/todayinenergy/detail.php?id=43395</a> April 20, 2020.