2021 Vision Forward: Addressing Climate Change Together



As America's energy leaders, INGAA's members recognize the need to build upon our efforts and to continue to act to address global climate change by advancing our commitment to minimize and reduce greenhouse gas (GHG) emissions, including methane emissions. INGAA members are determined to lead the effort to modernize our nation's interstate natural gas delivery network infrastructure with a goal of reducing emissions and helping minimize the impact on our climate.

Our commitments will include an active effort to do even more to address climate change by supporting renewables, as well as new and innovative technologies and process enhancements that will further reduce emissions. Working together, we are determined to support sound public policies that protect the environment while ensuring a safe, reliable and resilient energy transmission system that provides the affordable energy so many of our businesses and families need.

LOOKING AHEAD: THE ROLE OF NATURAL GAS

Addressing the problem of climate change requires us to recognize how best to reduce emissions while meeting the growing energy needs of our communities and the nation. Natural gas is and will remain a critical partner to building a cleaner energy future. Natural gas not only empowers critical energy services vital to our current and future economy, it also serves as the energy foundation to every aspect of our daily life. Because of our collective action, the adoption of natural gas has contributed to historic reductions in emissions.

Key Fact

In 2019, natural gas was the largest source of electric power generation in the U.S. (38%).¹ Fuel switching to natural gas has allowed the country to make rapid reductions in carbon dioxide emissions. According to the EIA, between 2005 – 2019, carbon dioxide emissions from the U.S power sector declined by 33%, with natural gas accounting for more than half of those reductions.²

Building on these environmental benefits, natural gas also continues to provide a more reliable and affordable energy source for tens of millions of homes and small businesses. Natural gas, and the infrastructure that delivers this vital fuel, is used to support critical business and industries such as restaurants, pharmaceutical research, refining, plastics, and electric power plants. During periods of both economic crisis and prosperity, these business and industries use natural gas to produce the products and services that our communities and hard-working families rely on such as electricity, food preparation, cars, cell phones, computers, prescription drugs, and so much more.

Natural gas is and will continue to be the back-bone fuel for America's economy, delivering 1/3 of the total energy in the U.S.³ Even as INGAA's members recognize the important societal benefits of natural gas, we know that more must be done to reduce emissions that contribute to climate change. We are committed to working together and developing more innovative policies and practices with a goal of significantly reducing emissions even further over the next several decades.

Solving Problems Together

Overcoming the dual challenges of addressing climate change while continuing to deliver affordable and reliable energy will require



governments, industry, consumers, non-government organizations, and all stakeholders to work together like never before to develop and implement sustainable, practical and near- and longterm solutions that benefit our shared goals.





2021 Vision Forward: Our Clean Energy Commitments

As part of our commitment to building a cleaner energy future, INGAA's members commit to the following:

- 1. Reducing their individual GHG emissions from their natural gas transmission and storage operations and to setting and meeting their individual emission reduction goals.
- 2. Identifying and continuing to implement long-term strategies to transition the industry and the individual INGAA member companies to lower emissions, while working as an industry towards reaching net-zero GHG emissions from natural gas transmission and storage operations by no later than 2050, supported by necessary technology advancements and sound public policy initiatives.
- 3. Providing consistent and transparent data collection, measurement, and reporting of GHG emissions from operations to support that INGAA members are making actionable progress to achieve our shared climate goals.
- 4. Reducing both the carbon intensity of our natural gas infrastructure, as well as supporting the reduction of net global GHG emissions by adopting and investing in more innovative technologies such as renewable natural gas (RNG), carbon capture, and other carbon solutions and transporting low or no-carbon fuels.
- 5. Working together with customers, governments, non-governmental organizations, and other stakeholders to accelerate efforts to reduce and minimize all GHG emissions across the entire natural gas value chain through the adoption of innovative solutions.
- 6. Investing in responsible environmental stewardship and practices as part of our efforts to modernize our nation's natural gas infrastructure, including supporting meaningful and positive engagement with the communities in which we operate.

Providing cleaner, safer, reliable, and more affordable energy is achievable, and our nation's natural gas transmission infrastructure is central to achieving these essential goals. Our vision forward is defined by our shared commitment to our environment, our communities, and all our families.

We recognize that sustainability and protecting our environment is not simply a choice; it is goal that can be achieved by working together with a clear belief that building a stronger and more equitable economy goes hand in hand with creating a cleaner world. Now, more than ever, INGAA is committed to supporting its members and their efforts to reduce GHG emissions as we all work together to address the issue of climate change.

^{3. &}lt;u>https://www.eia.gov/energyexplained/us-energy-facts/</u>.





^{1.} https://www.eia.gov/todayinenergy/detail.php?id=43035#.

^{2.} https://www.eia.gov/totalenergy/data/browser/index.php?tbl=T11.06#/?f=A&start=1973&end=2019&charted=0-1-6.

2021 Vision Forward: Innovating Towards a Cleaner Energy Future



As part of our vision forward, INGAA's members commit to investing in and undertaking a wide variety of initiatives as we strive to help build and support the adoption of more innovative technologies and smarter energy policies.

Through the use of more innovative technologies and process improvements, the United States is continuously advancing its ability to produce, transport, store, and deploy natural gas, a vital and foundational fuel, while further reducing GHG emissions.

Going forward, INGAA's members are further committed to supporting continued innovation which will be essential and necessary to achieve our long-term GHG emission reduction goals.

Reducing GHG Emissions: The Role of Innovative Technologies

By investing in and adopting innovative technologies and encouraging and working with other portions of the natural gas value chain to do the same, we can drive emissions even lower. INGAA's members are committed to reducing both the carbon intensity of the natural gas network and supporting the reduction of the absolute quantity of global GHG emissions derived from the energy we deliver. Reducing both the carbon intensity and the overall emissions will be important as economies around the world convert to a lower carbon future. INGAA's policies and innovative practices going forward are based on the following principles:

Innovating Our Delivery Infrastructure

While batteries may be able to address some energy storage needs, finding a solution that is scalable, cost-effective, addresses long-term and seasonal needs and that keeps energy affordable and reliable, is essential. Our nation's natural gas infrastructure has the capacity to safely, cost-effectively transport and store vast amounts of alternative energy. Over the coming decades, our nation's natural gas infrastructure network is well-suited to deliver lower-carbon fuels even as we grow our use of more renewable energy.

- 1. To support the growth of renewable energy and generation technology, we are committed to providing the services necessary for flexible, fast-ramping generation and reliable energy storage to help minimize the risk of power disruptions and black/brown outs during periods of peak demand.
- 2. To further reduce GHG emissions, we will continue to transport renewable natural gas (RNG) across our delivery infrastructure. RNG provides a beneficial use of waste methane from other sectors, such as methane from agriculture and food waste, resulting in an impactful reduction in GHGs. Increasing the access to and use of RNG will help provide carbon-neutral/potentially carbon-negative fuel and accelerate our progress toward a clean energy future through infrastructure largely already in place.
- 3. We are evaluating the potential application for hydrogen blending in existing natural gas systems. We are encouraged by the results of research and development programs that are exploring the potential to deliver new lower-carbon fuels through existing, repurposed or new delivery systems.
- 4. We are prepared to expand the natural gas transmission system which can affordably provide the long-term energy storage across an energy system that is safe, flexible, and reliable, which supports the increased investment in renewable energy.
- 5. We are committed to the further research and development of promising new technologies, such as RNG sources, renewable hydrogen, carbon capture, utilization, and sequestration (CCUS), and power to gas technologies to even further reduce emissions.





2021 Vision Forward: Developing More Constructive Energy Policy



As part of our ongoing commitment to the environment and addressing climate change, members of INGAA have taken many significant steps to minimize methane emissions across our operations. As part of our 2021 vision forward, we are renewing our public commitment to build a cleaner energy future.

Across INGAA, our members will continue to advance constructive ideas and positions that are beneficial to our shared environment, as well as our customers, communities, and employees.

To meet these critical climate change goals, we are committed to active and constructive engagement with government officials, investors, and a wide variety of other public and private stakeholders. Developing more constructive energy policy that utilizes our national gas transmission infrastructure, benefits our environment, and reduces emissions can be accomplished through policies and practices that support and encourage more innovation while ensuring that the cleaner energy our nation needs remains safe, reliable, and affordable.

For INGAA's members, the principles that should shape constructive energy policy include the following:

- Investments in natural gas infrastructure should enable citizens and businesses to benefit from stable and affordable energy costs, which will help our nation recover from the negative economic impacts of the Covid-19 pandemic, support the creation of jobs, fuel economic growth, and encourage implementation of projects to minimize GHG emissions.
- 2. We support equitable, efficient, effective, and flexible federal policy designed to minimize and reduce emissions across the entire economy, and a recognition that all sectors of the economy should contribute to any new

Record of Emissions Reduction

INGAA members have historically implemented measures to minimize GHG emissions. According to data reported to USEPA, these efforts have resulted in a reduction of CO2equivalent emissions from transmission and storage compressor stations that is the equivalent of removing more than one million passenger vehicles from the road. Many INGAA members are also members of EPA's Natural Gas STAR and Methane Challenge Programs, ONE Future, and various state GHG reduction programs.

federal emission reduction policies. Policies to address climate, including any policies that include a price on carbon or clean energy standards, must also diminish potential adverse financial impacts on consumers and avoid harm to the U.S. economy.

- 3. New energy and climate policies should avoid or mitigate adverse climate, environmental and economic impacts on disadvantaged communities and should be based upon meaningful engagement with such populations.
- 4. Funding for new energy innovations should include investment into research, development, demonstration and deployment of additional technologies to address climate change, such as renewable natural gas (RNG) sources, renewable hydrogen, carbon capture, utilization, and sequestration (CCUS), and gas to power technologies.
- 5. Efforts to address climate change should recognize the immediate emissions reductions derived from utilizing natural gas, and should recognize how natural gas is an energy partner that will enable the expansion of renewable and other energy technologies.
- 6. To help improve air quality and reduce carbon emissions globally, policy makers should recognize that through liquefied natural gas (LNG) exports, the U.S. is well-positioned to help other countries significantly and immediately reduce their reliance on higher carbon intensity fuels.
- 7. More constructive energy policies should support the modernization of natural gas infrastructure, which is key to minimizing GHG emissions and ensuring the development of safer, more reliable, and resilient infrastructure. Energy policies should not only promote greater development and use of RNG, hydrogen, CCUS, and other innovative technologies, but should also recognize and encourage the use of the natural gas system that will support the growth of both renewables and future energy storage capabilities.
- 8. The development of more effective public policy that reduces GHG emissions should also provide consumers with the option of utilizing natural gas and preserving customer choice of energy. Given the vital partnership between natural gas and the adoption of more renewable energy, it is critical that policies strengthen this foundational relationship as we develop more comprehensive and equitable climate change solutions.



