ERP-01 Energy and Natural Resources

Energy and natural resources are the life blood of manufacturing. Manufacturers need adequate, secure and affordable energy and raw materials to compete in the global marketplace. The NAM supports appropriate government policies including the development of a national energy policy that would provide a climate conducive to exploration, development and efficient utilization of all domestic energy resources and would encourage development of public lands in a manner consistent with sound environmental management. Reducing America's dependence on non-domestic energy and natural resources is prudent and desirable. The NAM supports an "all of the above" approach to energy, including recognition of the importance of energy efficiency to meeting future energy demands.

Manufacturers use a significant amount of the energy in this country and have long recognized the importance of energy efficiency to their operations. Providing additional energy to support a desired growth in manufacturing will require large capital investments by the private sector. The ability of the energy producing and energy consuming segments of industry to obtain adequate funding for energy-related investments must not be impaired by governmental policies. Government should not be in the business of picking winners and losers. The NAM will identify and oppose adverse effects of overly restrictive regulations and the implementation of policies that limit or eliminate energy sources and production. The NAM supports significant investments to modernize the national utility grid and utilize smart metering, distributed storage, and other advanced technologies to improve efficiency, affordability, reliability and security. The NAM is committed to protecting the environment and to environmental sustainability. The NAM supports governmental policies that promote innovation and recognize that technological advances over time have reduced the environmental impacts of energy production and consumption. Moreover, the NAM encourages policies that recognize these technological advances, allow for a proper balance between economic growth and protection of our environment, and take into account future challenges including those posed by climate change.

Adopted Winter 2012 Effective until Winter 2016

1.01. Oil and Natural Gas

Our nation's domestic oil and natural gas supply represents an important factor in our energy future. In today's global economy, U.S. manufacturers must be assured of an adequate supply of competitively priced oil and natural gas for industrial and commercial use, such as petrochemical feed-stocks, process gas uses and transportation fuels, and for power and steam generation.

Adopted Winter 2012 Effective until Winter 2016

1.01a. Liquefied Natural Gas

The dramatic increase in the domestic natural gas resource base has reduced the likelihood of the need for significant Liquefied Natural Gas (LNG) imports. Some now believe the U.S. could eventually become a net exporter of natural gas. An adequate supply of natural gas is needed to meet the growing demand of the U.S. manufacturing sector in a recovering economy. The NAM strongly supports federal and state policies to accommodate growth in domestic natural gas production. We further believe abundant domestic natural gas resources can fuel a renaissance in manufacturing in this country. The NAM fundamentally supports free trade and open markets. We support a natural gas policy process that is open, transparent and objective.

1.01b. Production

There are abundant oil and natural gas resources in the United States. Domestic demand for energy resources continues to increase. For manufacturers a balance between supply and demand is important to assure competitive, stable prices. The NAM supports policies that promote the leasing, exploration and development of the nation's oil and natural gas resources in an environmentally sound manner. Exploration and development of promising areas onshore, offshore and in the arctic can substantially lower our nation's energy vulnerability with minimal environmental impact. The emergence of hydraulic fracturing technologies has made the extraction of shale gas and shale oil more technically feasible and more cost effective. The development of Canadian oil sand and shale gas resources is also providing increasingly important sources of energy for American manufacturers and consumers. These new sources of gas and oil will have a significant positive impact on this country's ability to meet its feedstock and energy needs.

As is currently the case for states with onshore production from federal lands, and for Gulf Coast states with production from federal waters off their coasts, all states with federal offshore leasing and production should share in related federal revenues.

Adopted Winter 2012 Effective until Winter 2016

1.01c. Refining Petroleum Products

The refining industry is one of America's largest manufacturing sectors and refined petroleum products play a critical role in meeting domestic transportation fuel demands. U.S. refineries process crude oil into products such as gasoline, distillate and jet fuels, heating oil and chemicals for domestic use and export into world markets. U.S. refiners have responded to the call for a cleaner environment by producing cleaner fuels, such as reformulated gasoline, at competitive prices. Uninterrupted production of these products and the transportation infrastructure necessary to deliver them are essential to our national energy and economic security as well as to U.S. industry's ability to compete globally.

Adopted Winter 2012 Effective until Winter 2016

1.01d. Natural Gas and Manufacturing

Industry relies on natural gas for much of its energy needs and as a raw material. The NAM believes policies that encourage the cost-effective use of natural gas to grow American manufacturing should be encouraged.

The U.S. economy relies on natural gas for much of its energy needs and as a feedstock for commercial products. Natural gas is and will remain an important manufacturing commodity because of its scalability, affordability, versatility and its efficiency. The NAM supports policies at the federal and state level that facilitate the responsible and expeditious development of natural gas resources, allowing these benefits to contribute to America's economic recovery and to accrue for energy consumers.

Adopted Winter 2012 Effective until Winter 2016

1.02. Coal

Coal is the United States' most abundant energy resource and is a vital part of our efforts to meet our energy and transportation needs. The NAM believes increasing the utilization of

advanced clean coal utility and industrial generation technology as well as expanding coal-to-gas and coal-to-liquid technologies in an environmentally sound manner is an appropriate and desirable national policy. Coal generates a significant percentage of our nation's electricity, and maintaining coal in a diverse national energy portfolio is in the national economic interest. Government actions that unreasonably increase the cost of production and use of coal for limited environmental or health benefits are counterproductive. Laws and regulations governing air, water, and solid waste quality, are currently the most crucial restraint on the use of coal by industry and utilities. Environmental policies should be reviewed and applied in a manner that balances reasonable environmental objectives with the need to have a diverse fuel portfolio, including continued cost-effective coal use.

Adopted Winter 2012 Effective until Winter 2016

1.02a. Production from Federal Lands

The NAM supports policies that promote the leasing, exploration and development of the nation's coal resources in an environmentally sound manner. These are national resources on public lands, and they are vital to this country's economic growth. The NAM opposes efforts to unnecessarily restrict access to these national resources. Coal leasing programs, which have historically been sporadic, have limited the potential mining of billions of tons of coal that lie beneath federal lands. A long-term, stable and flexible leasing policy should be maintained to ensure the availability of federal coal reserves to contribute to our nation's energy needs. The NAM therefore supports streamlining and expediting coal leasing under the Federal Coal Leasing Amendments Act.

Adopted Winter 2012 Effective until Winter 2016

1.02b. Carbon Capture (CCS and CCUS)

The NAM supports continuing research, development and demonstration of carbon capture, beneficial use and storage (CCUS) technology. The NAM also supports expeditious research, development and demonstration of carbon capture use or storage (CCS) technology. (See ERP-02 1.13 for NAM climate change principles)

Adopted Winter 2012 Effective until Winter 2016

1.03. Alternative Energy Sources

A free market energy policy is the best way of encouraging economically sustainable alternative energy options. Government can play a positive role in support of research and development of alternative energy sources. The NAM opposes federal government mandates for use of alternative energy sources. Policies that mandate the commercial use of nontraditional energy sources before they are economically competitive are inefficient and impose unnecessary costs on our society.

Adopted Spring 20012 Effective until Spring 2016

1.03a. Clean, Renewable and Non-Traditional Energy Sources

The NAM supports policies that encourage an energy mix comprised of renewable energy resources, other power options, and allows energy efficiency measures but does not support mandating specific technologies or portfolio standards. Clean and renewable energy resources such as wind, solar, geothermal, hydro, landfill gas, municipal solid waste, excluding paper which is commonly recycled, and sustainable biomass provide alternatives to traditional fossil

fuels and together these resources account for a steadily rising share of U.S. energy supply and development. The NAM encourages Congress to review clean and renewable energy resources to ensure that policies avoid potential adverse impacts on users of renewable feed stocks, agricultural and forest resources. These incentives should not create winners and losers in the quest for developing renewable fuels. In establishing federal renewable energy policies, the NAM encourages Congress to recognize regional differences in renewable energy resource availability, and to not conflict with or preempt state programs already enacted. Development and utilization of non-traditional fuels and technologies will enhance energy flexibility and expand diversification of energy supplies.

Adopted Winter 2008 Effective until Winter 2012

1.04. Transmission

The NAM supports a transparent, streamlined and timely federal permitting process for interstate electric transmission infrastructure. Cost-effective investments in transmission infrastructure to improve the reliability, capacity, efficiency and security of the electric grid promote a competitive wholesale electricity market which benefits residential, commercial, and industrial ratepayers.

Adopted Winter 2012 Effective until Winter 2016

1.05. Demand-Side Management (DSM) Programs, Energy Efficiency Measures and Distributed Generation Resources

The NAM believes that the provision of cost-effective DSM services by individual customers and aggregator's programs, energy efficiency measures and distributed generation resources can help ensure a reliable and adequate electricity supply at a lesser cost. Investments in and opportunities for, technologies and measures that enable customers and aggregators to provide such services should not be precluded. The NAM also believes that electric and natural gas utilities should not be precluded from meeting future electricity and natural gas needs with these technologies and measures. Utilities also must not be precluded from recovering prudently incurred costs when implementing these programs, measures and services, and non-discriminatory market opportunities for DSM services.

Adopted Winter 2012 Effective until Winter 2016

1.06. Hydroelectric Power

Hydropower is a renewable resource that cannot easily be replaced, it does not deplete the nation's other fuel resources and contributes to the nation's energy self-sufficiency. Although hydro contributes a relatively small percentage of the nation's energy supply it is a significant percentage of the renewable energy supply. It is energy efficient, with energy conversion efficiency in the range of 85-95 percent. The NAM supports the continued use and development of hydropower resources.

The NAM supports the streamlining of the regulatory process for hydroelectric power development through the elimination of redundant or contradictory regulatory steps and avoiding the imposition of conflicting clauses in other legislative initiatives such as those related to clean air, clean water and endangered species.

With regard to hydro projects owned and operated by the federal government itself, efforts to offset their impact on fish and wildlife (including Endangered Species Act initiatives) must be carefully balanced with the preservation of the economic, recreational and public safety goals.

Adopted Winter 2012 Effective until Winter 2016

1.07. Nuclear Energy

Nuclear power is a safe and vital source of cost-effective base-load electricity that does not emit criteria pollutants or greenhouse gases into the atmosphere. It is the largest source of non-emitting power generation in the United States and the second largest source of electricity, supplying approximately 20 percent of the nation's power. The NAM supports the continued development and operation of nuclear energy consistent with the protection of public health and safety.

Nuclear energy helps stabilize the price of electricity while maintaining a diversity of domestic fuel sources. As the demand for electricity in the U.S. continues to grow, the NAM supports the construction of additional nuclear power plants that have been approved by the Nuclear Regulatory Commission to maintain a diverse portfolio of generating resources. The NAM also supports advanced nuclear technology for use in manufacturing as a source of carbon-free process heat.

In supporting the continued use and development of nuclear energy in the United States, the NAM supports the construction and operation of facilities covering all parts of the fuel cycle and nuclear energy generation, including power plants, fuel enrichment facilities, fuel fabrication plants, low-level and high-level waste handling and disposal operations, and other related facilities critical to supporting and expanding the nuclear energy industry.

The NAM supports policies that allow the federal government to fulfill its legal obligation to remove used fuel from commercial nuclear power plants and manage its long term disposal. We support the research, development and demonstration of technologies to close the fuel cycle while a permanent disposal facility, which is needed even if the fuel cycle is successfully closed, is developed. The NAM encourages the development of interim storage facilities for consolidating used fuel until recycling or permanent disposal facilities or both are available.

Adopted Winter 2012 Effective until Winter 2016

1.08. Energy Efficiency

Manufacturers are committed to reducing our energy intensity and producing more energy efficient consumer products to help reduce the U.S. demand for energy, save money, lower costs and lessen greenhouse gas emissions. American society has much to gain from sensible efficiency and waste reduction measures across all sectors of the economy.

1.08a. Industrial Energy Efficiency

Manufacturers use one-third of our nation's energy and are directly affected by the cost of energy in making products as well as by the cost of maintaining office operations. It is widely acknowledged that process and building system energy efficiency and conservation offer immediate and cost-effective opportunities to reduce energy cost inputs, reduce water use, stretch available energy supplies and decrease greenhouse gas emissions.

Manufacturers have taken the lead in making energy efficiency a priority. Improvements in energy efficiency in the manufacturing sector have helped the country to be more efficient in energy use per unit of GDP, and reduced the energy intensity of the U.S. economy. Manufacturers have achieved greater energy efficiency through cost-effective distributed generation, combined heat and power technologies, waste heat recovery systems, water reuse and recycling, intelligent energy systems like advanced metering infrastructure and demand response, and improved process manufacturing.

The most significant federal actions to increase industrial energy efficiency in the long run are those that will create a positive climate for capital investment and energy services investment for new and existing plants and equipment.

The NAM supports the use of favorable capital cost recovery tax policies including first year expensing (see TDEP-01 1.02a) for capital investment.

There is an important federal role to be played in basic research and development of new highrisk energy efficiency and waste minimization technologies in energy intensive industries, particularly where private sector incentives maybe inadequate.

There is also a clear federal role for supporting and incentivizing small and medium businesses in the use of proven energy management technologies, practices and services.

The NAM believes that previous overly prescriptive federal energy policies have failed in large part because cost-effective industrial energy efficiency improvements cannot be mandated. Industrial energy management is a complex moving target that includes process innovation, long-term quality planning, energy assessments of building and equipment purchases, linkage of water and energy efforts, employee awareness and waste minimization and recovery.

The NAM supports voluntary industry and market driven benchmarking of industrial facilities and processes for the purposes of raising the level of awareness of best in class energy management possibilities. The NAM opposes the imposition of mandatory data collection programs unless there is a clear justification of the need for the data and complete protection of proprietary data. The federal role should be limited to supporting industry in the development of voluntary information exchanges.

The NAM also opposes the imposition of mandatory industrial energy efficiency targets. Federal energy efficiency targets would have no meaning to most companies because manufacturing energy consumption varies dramatically from plant to plant. Product demand, weather, water availability, fuel price swings and capital investments such as pollution control technology influence manufacturing energy consumption.

The NAM supports federal programs that encourage and help manufacturers, especially small and medium manufacturers, to understand and deploy energy efficiency and energy management measures for the purposes of becoming more competitive in a global marketplace.

1.08b. High Performance Buildings

Manufacturers play a significant role in improving the efficiency of commercial and residential buildings. Since the building sector consumes approximately 40 percent of all energy used in the United States, the NAM supports market, regulatory, and institutional reforms that increase opportunities to better utilize energy efficiency in buildings. Improving building efficiency should start in the federal government, which is the largest owner of building inventory in the country.

The NAM supports policies to enhance private sector investment in public building efficiency improvement projects, as well as policies that strengthen standards for existing commercial, industrial and residential buildings.

In addition, since residential and commercial building improvements are often generated by obsolete infrastructure and involve large capital expenditures, the NAM supports providing favorable capital cost recovery tax policies including first year expensing. (see TDEP-01 1.02a)

Finally, the role of cooperative government-industry initiatives will be crucial in developing innovations that transform current construction and retrofit methods into an approach that fully integrates energy efficiency. As such, the NAM supports public-private efforts to engage the building industry and promote the development of a workforce that will shape the next generation of commercial and residential buildings. Hand-in-hand with this is the development of techniques to maintain efficiency through the lifespan of buildings, including energy audit systems and techniques and best practice-sharing of both.

Adopted Winter 2012 Effective until Winter 2016

1.09. Climate Change

The NAM and our member companies are committed to protecting the environment, including through greater environmental sustainability, increased energy efficiency and conservation and reducing greenhouse gas emissions, believed to be associated with global climate change. We know the U.S. cannot solve the climate change issue alone. Establish federal climate change policies, whether legislative or regulatory, to reduce greenhouse gas emissions must be done in a thoughtful, deliberative and transparent process that ensures a competitive level playing field for U.S. companies in the global marketplace.

Therefore, the NAM opposes any federal or state government actions regarding climate change that could adversely affect the international competitiveness of the United States' marketplace economy. Any climate change policies should focus on cost-effective reductions, be implemented in concert with all major emitting nations, and take into account all greenhouse sources and sinks. The NAM believes that federal climate policies generally should preempt state policies.

Adopted Winter 2012 Effective until Winter 2016

1.10. Natural Resources

U.S. manufacturers require access to natural resources, such as rare earth elements and other critical materials in order to produce products that are vital to the U.S. economy. Moreover, these resources are essential for the U.S. to remain competitive in the global manufacturing economy. Competition for raw materials should be market-based and not distorted by unwarranted or biased government action. The NAM supports government policies and actions that allow manufacturers access to these vital resources, support R&D, encourage the domestic mining and processing of such resources, and support unimpeded trade thereof. Additionally, the NAM supports reasonable reform of the Mining Law of 1872 that recognizes regulation of the mining industry under existing comprehensive environmental laws and compensates the federal treasury at royalty rates based on mineral values.

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