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A way forward on the climate crisis and energy insecurity

Both climate change and energy security must be understood as collective responsibilities among allies and friends. American LNG is a major geostrategic tool for the United States and its allies and trading partners.

By Ernest J. Moniz

Five-alarm fires are raging everywhere: climate change, energy insecurity issues raised by Russia's invasion of Ukraine, and supply chain bottlenecks from the long tail of COVID19. As President Biden wrapped up his Middle East trip last week, these challenges provide an opportunity to move beyond short-term oil prices toward long-term solutions. The impact of climate change is visible and accelerating, with dramatically increased record-setting fires, droughts and floods, heat waves and polar vortices, sea level rise and tropical storm intensity, and biodiversity loss across the globe. The world's progress toward reducing greenhouse gas emissions has been woefully inadequate.

At the same time, Russia's war on Ukraine has amplified an uncomfortable reality for many: Oil and gas remain central to global energy systems and are key to energy security, at least in the near and mid term. Sloganeering against the transitional role of fossil fuels has impeded progress on both climate change and energy security, both of which are ultimately best served by the clean energy transition. Climate change and energy security must be one conversation to most effectively address both. US decision makers in the public and private sector need to implement data-driven plans that reflect real needs and enable a credible and sustained energy transition to zero-carbon energy in the mid-century time frame. Germany's situation exemplifies a complex web of climate, energy security, and foreign policy concerns. Its government, while focusing on

renewables, abandoned nuclear power and moved to increase an already unhealthy overdependence on Russian natural gas, thus forcing the restart of old coal plants and a belated commitment to liquefied natural gas import terminal construction. Yet Germany was compelled to join its allies in imposing tough economic sanctions on Russia despite the prospect of economic pain.

Unlike Germany, the United States is the leading producer of oil and natural gas but cannot be complacent. Both climate change and energy security must be understood as collective responsibilities among allies and friends. American LNG is a major geostrategic tool for the United States and its allies and trading partners.

US exports and imports of oil and refined products are also large and balanced and crucial to both our energy system and trading partners. The largest recipients of US oil and oil product exports include the United Kingdom, France, Netherlands, Japan, South Korea, India, Brazil, and Mexico. The export/import balance should not be compromised by overreacting to today's alarms.

The intersection of these issues is also manifest in consumer sticker shock from high and volatile energy prices, with inflation from supply chain bottlenecks and the Russian war of choice hitting consumers hard. These ramifications have led democracies to focus, perhaps overly so, on the "here and now" of electoral cycles, often at the expense of crafting a flexible, long-

term, broadly supported strategy to meet multiple objectives: preserving energy security, reliability, and social equity throughout the clean energy transition.

Biden has taken strong actions in these areas. The bipartisan infrastructure law included many clean energy initiatives, and federal agencies are addressing critical supply chains for the minerals and metals that we need to manufacture clean energy technologies. The administration has also strengthened the US Department of Energy's innovation platform, from research through deployment and placed social justice at the center of the energy transition.

The Biden administration addressed energy security and high energy prices by releasing oil from the Strategic Petroleum Reserve, helped get additional LNG cargoes to Europe, encouraged other countries to increase their oil and gas production, and invoked the Defense Production Act to help meet supply chain shortfalls.

Still, as Biden advances his Middle East agenda, there are many more domestic actions the United States can take to strengthen our positions on the clean energy transition and energy security positions for the near-, mid- and long-term.

Reduce near- and midterm oil demand:

Incentivize a continuation of the work-from-home model that has worked surprisingly well during the COVID-19 pandemic. Add incentives for high-efficiency internal combustion engine vehicles (such as hybrids) to those we have for electric vehicles.

Advance collective energy security and climate change mitigation in the near- and midterm:

Expand the oil and gas sector dialogue to include the financial sector (which has been driving balance sheet gains rather than production) and international allies (with a particular focus on demand-side commitments that support private investment). Support expediting additional LNG export capacity in exchange for measurable progress on net-zero LNG and methane emissions reductions across supply chains.

Secure materials supply chains for clean energy:

Accelerate the State Department's Minerals Security Partnership with allies and friends to help generate the needed supply chain investments.

Support investments in clean energy projects:

Work with Congress to reduce — with a strong possibility of bipartisan support — the many policy and regulatory barriers that impede clean energy projects from successfully passing the “investability test” of institutions with large pools of capital and requirements for non-concessionary returns.

Broaden support for clean energy innovation:

Aggressively use tools like the Department of Energy's new Office of Clean Energy Demonstrations and the expanded authorities of its Loan Programs Office and innovation incubator ARPA-E to bring low-carbon energy technologies to demonstration and lower their cost. Work with Congress to pass in the next months a major clean energy tax incentive package, likely through budget reconciliation. As a nation and collectively with our allies, we must move forward to develop, fund, and implement an integrated, thoughtful, and time-sequenced plan to address the interrelated five-alarm fires of climate change and energy security.

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