FINDINGS OF THE INITIATIVE

Third Italy–US Bilateral Dialogue on Energy, Security and Emerging Technologies

Embassy of Italy, Washington D.C. — October 29–30, 2025

Building upon the success of the 2023 and 2024 editions, the *Bilateral Dialogue* hosted by the Embassy of Italy and co-organized by **WEC Italy** and **WEC USA**, in collaboration with the **Atlantic Council** and with the support of the **Embassy of Italy in Washington**, represented a new milestone in the long-standing partnership between Italy and the United States, reaffirming the shared commitment to energy security, technological leadership, and industrial diplomacy in an era of fast-paced geopolitical transformation and exponential digital energy demand.

PARTICIPANTS

Jean Paul Allain, U.S. DOE — FES • Clara Andreoletti, Eni Next • Jarrod Agen, National Energy Dominance Council (U.S.) • Kaush Arha, Forum on International & Interregional Connectivity • Matt Armstrong, Baker Hughes • Trent Bauserman, Commonwealth Fusion Systems • Gracelin Baskaran, Center for Strategic and International Studies (CSIS) • Houda Ben Jannet, OMEC • Stefano Besseghini, ARERA • Guido Bortoni, CESI • Romano Borchiellini, Politecnico di Torino - Energy Center • David Chiaramonti, CEM Biofuture Platform • Corrado Clini, Ambiente d'Italia • Alberto Comito, Embassy of Italy in Washington DC • Ruggero Corrias, Newcleo • Victoria Coates, Heritage Foundation • Luca Dal Fabbro, Utilitalia • Mario Di Carlo, Studio Ristuccia Tufarelli & Partners • Federico Dubini, Enea Capital • Frank Fannon, Fannon Global Advisors • Piero Gattoni, Consorzio Italiano Biogas • Luke Hartauer, Rio Tinto • Douglas C. Hengel, USLNG Association • Andrew Holland, Fusion Industry Association • Shaylyn Hynes,

Venture Global • Olga Khakova, Global Energy Center Atlantic Council • Marcus Krembs, Enel North America • Seth Levey, Glencore • Domenico Maggi, Snam • Igor Malgieri, Edison • Piero Martin, DTT Project • Marco Margheri, WEC Italy • Helaina Matza, TechMet • Brigham A. McCown, Hudson Institute • Mark W. Menezes, U.S. Energy Association • Charles Moran, National Nuclear Security Administration • Demetrios Papathanasiou, World Bank • H.E. Marco Peronaci, Ambassador of Italy to the United States • Mary Prentice, Liberty University • Abigail Remler, Special Competitive Studies Project • Adrienne Schweer, Oklo • Morgan Scott, EPRI (WEC USA Host) • Zachary Scott, Green Carbon • Jeremy Shapiro, ECFR • Cole Simons, GE Vernova • Paolo Storti, WEC Italy • Massimiliano Tacconelli, Walter Tosto • Brendan Williams, PBF Energy.

CONTEXT

The Dialogue convened institutions, industry and the research community at the Embassy of Italy to take stock of a rapidly shifting energy landscape. The immediate past has been defined by Europe's accelerated exit from Russian gas and by the emergence of U.S. LNG as a structural pillar of European security of supply. The near future is being shaped by a surge in electricity demand from data centers and AI, the reconfiguration of global energy and materials flows along North–South axes, and intensifying strategic competition across critical value chains. Against this backdrop, participants focused less on how to translate alignment into bankable projects, resilient infrastructure and durable rules.

FINDINGS

Energy diplomacy as industrial policy

Across sessions, energy was treated not only as a commodity but as a tool of statecraft and growth. The transatlantic relationship is moving from episodic coordination to an operational partnership aimed at concrete outcomes—deals closed, projects permitted, shovels in the ground. Participants called for tightly sequenced roadmaps, regular progress checks, and an insistence on execution timelines that keep pace with market needs and geopolitical imperatives. Italy's active role within the European and transatlantic frameworks was underlined, particularly in promoting a smarter, business-friendly regulatory environment across strategic sectors such as LNG, sustainable nuclear, biofuels and fusion energy, where policy alignment can accelerate investment and technology uptake.

From security of supply to systemic resilience

The discussion moved beyond volumes and routes to the wider notion of resilience. Resilience here means networks that withstand low-probability, high-impact events; digital systems hardened against cyber risks; cross-border interoperability that turns national assets into regional strength; and market designs that reward flexibility and preparedness. Financing and regulation must evolve accordingly, recognising the public-good nature of grids and flexibility and valuing investments whose payoff is the avoidance of failure.

The LNG backbone and a North–South corridor

The rapid scaling of U.S. LNG has underwritten Europe's diversification, while Italy's regasification and interconnections position it as an entry point toward Central Europe. The Dialogue underscored the need to treat LNG, storage and pipeline upgrades as a single corridor strategy, not a collection of projects. That strategy includes unclogging choke points, mobilising development finance and export

credit where appropriate, and aligning certification and methane performance to prevent regulatory friction from becoming a barrier to security. Participants also recognised Italy's role in facilitating dialogue between European and U.S. partners on regulatory convergence and investment incentives, helping shape a transatlantic LNG corridor that combines industrial competitiveness with environmental integrity.

Grids for the AI era

The electrification wave led by hyperscalers and cloud infrastructure is recasting system adequacy. Participants converged on a pragmatic three-step approach—stabilise, optimise, grow—anchored in accelerated replacement of ageing components, stronger transmission and smarter distribution. Dispatchable capacity remains essential to keep the lights on while the system adapts; demand-side resources and digital control layers complement physical reinforcement to deliver reliability at least cost.

A realistic technology portfolio

The Dialogue affirmed a balanced pathway: flexible gas (with robust methane management) to support variability, storage at scale across transmission and behind the meter, CCS/CCUS where it materially reduces industrial emissions, and a renewed nuclear proposition—SMRs and advanced reactors progressing to commercial deployment, with fusion on a structured R&D trajectory. The emphasis fell on financeability and replicability: technologies must slot into real grids, real permits and real balance sheets.

Nuclear fuel cycles and new commercial models

A notable thread was the shift from government-only paradigms to commercially led fuel-cycle initiatives, including recycling of spent fuels and the build-out of fabrication capacity for advanced reactors. This is less about novelty for its own sake and more about security, cost and time: diversifying fuel sources, shortening supply lines and creating industrial ecosystems that can scale. Collaboration between European and U.S. firms is moving from MoUs to work plans, with safeguards and non-proliferation rigor as non-negotiables.

Storage and flexibility come of age

Evidence from recent procurements suggests a rapid improvement in the cost and performance of electrochemical storage. Storage is no longer an add-on; it is central to adequacy and quality of service, from transmission-level assets to customer-sited systems. Participants highlighted the need to hard-wire flexibility into tariffs, market rules and investment planning so that storage, demand response and fast-ramping generation are procured in coherent stacks rather than piecemeal.

Biofuels and the "common vocabulary"

Discussions on bioenergy highlighted the importance of developing a shared language and certification system to ensure sustainability and scalability of biofuels and biogas across the Atlantic. Participants stressed that establishing a common vocabulary is crucial to bridge regulatory approaches, recognise verified emission reductions, and attract private investment. The Italian experience in biomethane deployment—where policy and market tools have successfully mobilised the agricultural sector—was cited as a valuable model for integrating circular bioeconomy principles into national and regional energy strategies.

Standards, measurement and the "common vocabulary"

An enduring obstacle to cross-Atlantic deals is semantic rather than technical: differing definitions, baselines and verification methods for emissions and sustainability claims. The Dialogue called for a common vocabulary on methane measurement, certification and traceability—ambitious where it matters, practical where systems differ—so that environmental performance unlocks investment instead of stalling it.

Critical raw materials and circularity

Security now depends as much on materials as on molecules. The partnership must extend upstream to mining, but equally to midstream processing, refining, recycling and design-for-circularity. Africa figured prominently as a theatre for responsible development, where transatlantic finance, standards and industrial know-how can build trusted capacity while delivering local value. The objective is to move from risk awareness to risk reduction along the whole chain. In this context, Italy's Mattei Plan was cited as a blueprint for building pragmatic, partnership-based cooperation with African nations, combining energy access, industrial growth, and sustainability goals.

The Mediterranean as a connective space

The Mediterranean emerged as a platform—not a periphery—linking North America, Europe and Africa. Energy and industrial corridors were discussed as test beds where diplomatic alignment, infrastructure security, market design and finance can be integrated into investable projects. The Italian system's position across these routes gives it both opportunity and responsibility. The Mediterranean's centrality was linked to broader initiatives such as the India–Middle East–Europe Corridor (IMEC), which participants viewed as a potential strategic complement to transatlantic infrastructure efforts. Italy's participation in these projects—together with its leadership in the Mattei Plan—positions it as a bridge between Europe, Africa, and the Indo-Mediterranean region, fostering diversified, resilient value chains for energy and materials.

Finance that prices what resilience is worth

Resilient networks and flexibility have a cost—and a value. Participants argued for regulatory compact and financing architectures that reward prevention, reduce the cost of capital and provide revenue certainty commensurate with asset life. This includes calibrated use of guarantees and blended finance for cross-border infrastructure, and clarity on how resilience services are remunerated over time.

People, knowledge, and the pace of delivery

Universities, labs and industry need to operate as a single innovation continuum, with workforce development embedded from the start. The involvement of students and young professionals throughout the Dialogue was a reminder that talent pipelines are strategic infrastructure. Just as important is institutional tempo: aligning policy cycles with project delivery and maintaining momentum through regular check-ins and transparent reporting on milestones.

AI, data centers, and flexible power

Hyperscalers are driving a step-change in demand, especially around Northern Virginia, making "power for AI" and "AI for power" two sides of the same coin. Near-term relief comes from software-defined grids—dynamic line rating, load orchestration—and from data-center flexibility designed in from the start (shifting/pausing non-critical workloads), turning compute into a controllable grid asset.

Fusion, SMRs, and transatlantic supply chains

The fusion decade is moving from science to steel: SPARC targets Q>1 in 2027 with ARC breaking ground in 2028, while first-wave SMRs advance in parallel. Italy's DTT will de-risk heat-exhaust at reactor-relevant power densities and feed an Italian–EU supply chain already delivering high-value forgings for North American builds—proof that co-investment and offtake can accelerate commercialization.

Rules, financing, and explainable decisions

Delivery needs regulators with cadence and clarity—fixed calendars, transparent metrics, and explainable-AI tooling for system planning and tariffs. Financing must match the new risk profile: blending public catalytic capital (for first-of-a-kind infrastructure, materials, tritium) with private equity and long-tenor offtakes, while keeping methane, CCS, and storage in the portfolio to hedge volatility during the build-out.

Digital–physical "two speeds" and resilience by design

Energy hardware turns over in decades; the digital layer iterates in months. Close the gap with digital twins, edge intelligence, V2G and community assets, and modular options where "a ship can be more flexible than a pipe." Bake in cyber-resilience (hardware-anchored security, human-in-the-loop operations) as AI permeates control rooms, so that speed never outruns safety.

FINDINGS (SYNTHESIS)

The Dialogue confirmed a shift from strategy to implementation. Europe's diversification is real; the LNG backbone is in place; and Italy's geography and assets make it a natural hub for a North–South corridor into Central Europe. The next frontier is resilience: modern grids, interoperable markets, cyber-physical security and flexibility at scale. A realistic technology mix—gas with strong methane management, storage, CCS/CCUS, and a revitalised nuclear offer—can power the AI era while preserving climate ambition. Progress will hinge on a common transatlantic vocabulary for environmental performance, on supply-chain partnerships that span mining to recycling, and on finance and regulation that recognise the public-good characteristics of resilient infrastructure. The Mediterranean and African theatres provide the proving ground where these elements can be combined into bankable projects under transatlantic leadership. The discussions reaffirmed Italy's bridging role within the transatlantic partnership and its contribution to shaping a European regulatory framework that is innovation-driven, business-friendly, and open to global cooperation—from LNG and biofuels to advanced nuclear and fusion

All the material from the Third Italy–US Bilateral Dialogue is available on the WEC Italy website at the following link. WEC Italy will continue to foster knowledge sharing and collaboration between Italian and U.S. stakeholders across the fields of energy, security, and emerging technologies. For further information, please contact the Secretariat at **segreteria@wec-italia.org**

WEC Italy Secretariat
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