



# G7 Energy Ministerial in Hamburg

## COMMUNIQUÉ

### G7 Hamburg Initiative for Sustainable Energy Security

We, the Energy Ministers and their representatives of Canada, France, Germany, Italy, Japan, the United Kingdom, the United States, and the European Commissioner for Climate Action and Energy, met in Hamburg on 11 and 12 May 2015 to discuss progress since our last meeting in Rome in strengthening collective energy security and to decide upon further initiatives to effectively improve sustainable energy security of G7 countries and beyond, taking into account recent market developments.

We reaffirm our continuing commitment to the principles for energy security that we agreed at the Energy Ministers' meeting in Rome in 2014. We welcome the progress achieved since last year's meeting, as described in the Rome G7 Energy Initiative implementation report. We will continue to implement the Rome G7 Energy Initiative.

We believe that resilient and safe energy systems are necessary to underpin economic prosperity and development. We emphasise the need for sustainable energy security. Measures aiming to enhance energy security should whenever possible be both economically and environmentally sustainable. We believe that these measures will help to deliver competitive and affordable energy prices for private consumers and for industry, allowing for economic growth, job creation and social development, boosting productivity, and facilitating income generation. We regard enhanced energy efficiency and the increased deployment of renewable energy technologies, other sustainable low carbon technologies and well-functioning and integrated markets as major pillars of a secure and sustainable energy system.

We regard diversification as a core element for energy security. We aim to further diversify the energy mix, energy fuels, sources and routes. We believe that this will help to improve the resilience of energy systems in the short, medium and long term against supply disruptions.

We reaffirm that deep cuts in global greenhouse gas emissions are required according to the science and underline the urgency of a consequent energy transition to further decouple economic growth from carbon emissions. We call upon all countries to submit their INDCs (Intended Nationally Determined Contributions) well in advance of COP21. In this regard, we reaffirm the crucial importance of COP21 in Paris in December 2015 for concluding a global agreement – a new protocol, another legal instrument or an agreed outcome with legal force under the Convention – that is

ambitious, robust and inclusive, and we remain committed to doing our part to effectively limit the increase in global temperature below 2°C above pre-industrial level.

Against the background of the crisis between Russia and Ukraine, and reaffirming the principles adopted at the G7 Energy Ministerial Meeting in Rome in 2014, we reiterate that energy disputes should be resolved through dialogue based on reciprocity, transparency and continued cooperation. We remain deeply concerned about the on-going instability in Ukraine, which poses a much broader threat to energy security in the region. We call for an immediate resolution of the crisis and reiterate our affirmation that energy should not be used as either a means of political coercion or as a threat to security.

We have identified the following areas for joint action in close cooperation with our partners.

## I. Secure Energy Systems

Transparent, liquid, and competitive energy markets are a prerequisite for energy security, underpinned by diversification of supply countries and transport routes.

### Transparent, liquid and competitive gas markets

We agree that fully interconnected and liquid gas markets will ensure that there are no single dominant suppliers and will give consumers choice. We also agree on the need to advance gas market integration for example by creating stable conditions for investments in physical infrastructure for better interconnection, including reverse-flow capabilities, following an analysis of risks, costs and benefits. Recognising the valuable contribution of LNG to global gas supply security, we agree to take further steps to achieve a more flexible and transparent LNG market. Close cooperation with existing processes such as the LNG-Producer-Consumer Conference in Tokyo should be explored.

### Electricity security and resilience

We agree to continue cooperation to thoroughly evaluate the vulnerabilities of our energy systems. Following the gas supply stress tests and national assessments by G7 countries, we agree on the need to further assess the vulnerabilities of our electricity systems.

An increasing number of countries are following the path of a rapid expansion of renewable energy. There is a number of challenges as energy systems change and related greenhouse gas emissions are reduced, one of which is how to integrate growing shares of variable renewable energy into electricity systems. We see a leadership role for the G7 in understanding the requirements to tackle this challenge and to help create the conditions for new investments in the electricity sector.

### Cybersecurity of the energy sector

Cyber threats to energy delivery systems are becoming increasingly complex and sophisticated. Energy systems, built on a network of digital processes that assure energy is produced, transferred, and distributed through interconnected electronic and communication devices which monitor and control the necessary infrastructure and services are the backbone of our economies. The need for these systems to be interoperable and interconnected across the energy value chain is increasing, necessitating supporting digital frameworks and infrastructure.

## II. Support of Most Vulnerable Countries including Ukraine

We welcome the fact that since our last meeting substantial energy reforms have been set in motion in Ukraine and important reverse flow capacities have been put into place benefiting Ukraine. Nevertheless, we call on Ukraine to continue implementation of its critical energy policy reforms. We reaffirm our support for Ukraine and other vulnerable countries in reforming their energy policies towards economically sound, transparent, secure and sustainable energy systems. In this context, we welcome all efforts to support Ukraine in tackling the huge challenges faced by the energy system. We welcome efforts of the trilateral talks of EU, Ukraine and Russia to reach a sustainable agreement for gas deliveries.

## III. Energy Efficiency

We underline that energy efficiency is key to enhancing sustainable energy security and contributes to the competitiveness of our economies. Energy efficiency should be regarded as the “first fuel” and the most cost-effective way to meet energy demands. We commit to leverage the large untapped potential for energy efficiency and aim to strengthen our economies and make them more competitive by increasing energy productivity. We call on other countries to join our efforts and to consider options to further strengthen the effectiveness of work on energy efficiency.

## IV. Energy Resources and Innovative Energy Technologies

Domestic resources are a major option to diversify the energy mix. We support the enhanced use of energy efficiency and renewable energy as well as other domestic resources (including nuclear energy, which can work as a base load energy source, in those countries which opt to use it). We recognize that fossil fuels will remain an important part in the energy mix for some time, as we progressively reduce greenhouse gas emissions in our energy systems. In this context, we encourage countries which opt to make use of carbon capture, use and storage to collaborate on large-scale demonstration projects and countries which opt to develop and use shale gas and other unconventional resources to collaborate on safe and responsible development. We remain committed to eliminating inefficient fossil fuel subsidies.

We also support continued investment in research and development and the promotion of deployment of innovative energy technologies. In this regard the further improvement of the performance and reduction of the cost of technologies such as smart grids, systems optimization, energy storage, electric vehicles, offshore wind energy, and other flexibility options offer crucial contributions to sustainable energy security.

## *From Principles to Action: Hamburg Initiative for Sustainable Energy Security*

Based on the principles agreed in Rome, we agree to take additional concrete joint actions in order to further strengthen sustainable energy security in the G7 countries and beyond.

1. We welcome the recommendations for enhancing gas supply security, developed by the IEA at the request of G7 Energy Ministers, and agree to give careful consideration to their implementation. We ask the IEA to build on its work in collaboration with European Commission and others by providing further advice on options to strengthen the resilience and flexibility of gas markets, covering both pipeline gas and LNG. This should include aspects of emergency response, contractual arrangements, gas storage facilities, indigenous gas resources and infrastructure projects.
2. We will continue to exchange and to work on energy vulnerability assessments, in particular regarding the security of supply in the electricity sector and its interdependencies. This will include cross-border flows, acceptable risk levels for supply interruptions, demand response and infrastructure. We also request IEA in close cooperation with IRENA to evaluate the most effective options to ensure electricity security, including through increasing system flexibility in order to integrate variable generation.
3. We commit to work to improve the cybersecurity of the energy sector. This work should include analysis of our different approaches, exchange of definitions and methodologies for the identification of cyber threats, vulnerabilities and the promotion of best practices, investment in cybersecurity capabilities and capacity building.
4. We reaffirm our deep commitment to continue to support vulnerable countries, including Ukraine, in their efforts to reform and liberalize their energy systems to strengthen their energy security. This will include efforts to encourage investments in energy infrastructure and energy efficiency in Ukraine and other Energy Community countries. We will maintain close consultations with Ukraine on a roadmap for energy reforms, resilience planning and future gas supply issues. We call on the IEA, IRENA and international financing institutions to join our efforts in supporting Ukraine and other most vulnerable countries in Europe.
5. We agree to conduct an analysis of main energy efficiency measures and their implementation in G7 countries. We will continue to promote the creation of energy efficiency networks of companies and foster dialogue between them. Together with the European Commission, we will explore the establishment of energy-related product data bases that enhance transparency in product energy efficiency. We ask the IEA in collaboration with IPEEC and other fora to conduct this analysis and to develop recommendations for these initiatives.
6. We commit to work with each other and with other like-minded countries to raise the overall coordination and transparency of global spending on clean energy research, development and demonstration. We also agree to seek to further reduce costs of offshore wind energy by exchanging best practices among relevant national and international stakeholders.

We will submit the G7 Hamburg Initiative for Sustainable Energy Security to our Leaders for their decision at the G7 Summit at Elmau Castle.