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ENERGIZING EUROPE

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Introduction

With 450 million people, Europe is the largest importer and second largest consumer of energy in the world. But for far too long, European energy policy has been fragmented even as today's electricity grids and gas pipelines link countries, continents and pricing in unprecedented ways. Recent gas disputes, concerns over climate change, and China and India's soaring energy needs have driven the issue to the top of the European Union's political agenda. How can Europe secure its energy future? What alternative technologies are on the horizon? What role does a common EU energy policy have in the bloc's external relations?

To answer these and other questions, Sitra, the Finnish Innovation Fund, and the Alfred Herrhausen Society, the International Forum of Deutsche Bank, held a conference on European energy and environmental policy September 26–28 in the Suomenlinna Sea Fortress in Helsinki. Under the title "Energizing Europe", the conference brought together government and EU officials, businesspeople and journalists to discuss how to ensure a safe and reliable energy supply.

Format

The conference began with a welcome reception and remarks by the Finnish Minister of Trade and Industry, **Mauri Pekkarinen**. Over the next two days, participants took part in five panels on:

- Energy, environment and the future;
- The role of Russia in European energy and environmental solutions;
- Securing Europe's energy supply;
- Energy and foreign policy; and
- Nordic versus German policy approaches.

On the final day, Air Commodore (Retd) Jasjit Singh gave a presentation on India's energy policy strategy, thereby giving his fellow participants an overview of Asian energy needs and approaches. The conference ended with recommendations for a common European energy policy.

Energy, environment and the future

Today's energy and environmental policies must take into account tomorrow's demographics, said **Klaus Töpfer**, former director of the United Nations Environment Programme, in remarks opening the first session. Africa and Asia's population will grow rapidly and move more and more into cities, requiring sustainable development. Developed countries will face depopulation and urban decline, and a lot of energy will be needed to regenerate former industrial cities like Detroit and Liverpool.

In addition, the gap in per capita income between developed and developing countries will widen and cause migration as a kind of economic leveler. To stem this dangerous migration, the West should promote development in poor nations. But this will also require energy and have a climate impact because well-being raises lifestyle expectations and, with it, energy demands.

After discussing the implications of these demographic shifts, Mr. Töpfer outlined the competing dimensions of energy policy: security of supplies, economic feasibility of use (price), and social and environmental considerations (climate change). To him, the real energy security question is not when oil will run out, but rather if the increase in demand is outpacing the increase in supply. The answer is yes, and as demand grows faster, prices go up and energy becomes increasingly a foreign and security policy issue. On climate change, he urged the world to act in a serious and sensible way — he recommended so-called no-regret measures — given the limitations of current knowledge. Mr. Töpfer proposed switching to less carbon-intensive sources and influencing the demand side toward more sustainable consumption as an integrated approach to all three dimensions.

Then Mr. Töpfer talked about the tensions between the developed and developing worlds as the former implements enlightened energy and climate change policies. Until now, industrialized nations could externalize energy costs through carbon emissions because access to the atmosphere was free. But with the atmosphere's assimilation capacity exhausted, they want to limit developing countries' ability to do so. This is unfair because those not responsible for global warming have to pay the price for it.

The solution, according to Mr. Töpfer, is mitigation in developed countries and adaptation in developing ones. Mitigation involves attempts to slow climate change by lowering greenhouse gas emissions. The EU Emissions Trading Scheme is a step in the right direction, he said, but it can only be effective if it sets caps and allows market price determination for carbon. Adaptation means developing ways to reduce people and places' vulnerability to climate impacts. Mr. Töpfer called on Europe to invest in climate robust infrastructure in developing countries as part of economic cooperation with them.

When asked about China's coal dependency, Mr. Töpfer said protecting development capacity, not the environment, is the most compelling reason for China to clean energy production and use. China can no longer externalize the costs of energy without grave risk to human health and, ultimately, growth. It must invest in technology and renewable energy sources. However, recognizing that China and other countries will use coal for some time, Mr. Töpfer suggested that Europe continue its own coal use with the aim of bringing cleaner technologies onto the market.

The role of Russia in European energy and environmental solutions

The second panel examined EU–Russian energy relations. **Sergey Sirenko**, a consultant in Russia's fuel and energy sector, said the economic basis for energy cooperation was strong — he pointed to continued European demand for gas and to joint electricity projects — but noted relations between Moscow and Brussels are tense. Skyrocketing oil prices have fuelled Russia's economic revival and, with it, a change from a reactive to a proactive foreign policy that worries much of Europe.

Despite this, Mr. Sirenko thinks Russia and the EU can create energy interdependence and therefore a higher degree of energy security. He cited as an example Moscow's willingness to give the European Community access to Russian hydrocarbon production in exchange for downstream assets. But now Europe must decide what price it is prepared to pay for its energy security. Mr. Sirenko urged patience with Russia's undemocratic model of capitalism, saying energy interdependence could make Europe more secure and help to liberalize Russia at the same time.

In his response, **Klaus Gretschmann** of the EU Council expressed concern over Russia's use of energy as a policy tool. He questioned whether Russia would remain a reliable supplier of energy, as it seems to be driven increasingly by geopolitical objectives. This impression comes from a feeling of encirclement, he explained. Many view Russian pipeline projects in North Africa, Southeastern Europe, Central Asia and the Baltic Sea as an effort to surround Europe.

Next Mr. Gretschmann outlined Russia's objectives. Domestic stability and vibrant growth are key goals of the Russian economy and can be achieved through energy wealth. Russia also wants to secure external demand, especially as Europe seeks out other gas suppliers and develops alternative fuels. Lastly, Russia may be using energy to secure its status as a superpower equal to the United States. Does this mean Russia has the upper hand? Not quite, Mr. Gretschmann said. Although Europe's dependence on Russian gas has increased, almost 70% of Gazprom's revenues come from the continent. Looked at more broadly — Gazprom provides roughly a fourth of the Russian budget — one sees interdependence between Europe and Russia.

Mr. Gretschmann anticipated an end to easy growth and supply shortfalls if Russia does not reform its energy sector. Europe, he noted, lacks unity toward Russia. Some EU member states want a strong Europe to stand up to Russia; others with fewer vested interests want to distance themselves from tensions; and still others want to comply with Russian demands because of important areas of non-energy cooperation. This all means that friction will continue in the short to medium term and that the two sides need to forge a more balanced partnership, he said.

Based on his country's experience, **Pekka Sutela**, head of the Bank of Finland Institute for Economies in Transition, was more optimistic on Russia. He said most Finns were not troubled by the depth of energy relations with Russia. In fact, he cannot understand why so few people outside Finland expect a „Europeanization“ of Russian businesses when internationalization has been, and will remain, a driving force of the Russian economy. He pointed to the growth of the middle class and the appearance of modern services and commodities in the last 10–15 years as signs of robust structural change that he hopes will continue.

Mr. Sutela also noted that Russia's energy market is getting smaller relative to its economy. Together with an increase in domestic demand, this means Russia will have less to export and must look increasingly at Central Asian reserves. So the availability of Russian supplies will be a major concern among Europeans, not excessive dependence. However, Mr. Sutela was skeptical that Europe would be able to liberalize its energy markets and pursue a unified policy under these circumstances.

Finally, former U.S. Ambassador to Germany **John Kornblum** outlined the history of European–Russian relations and implications for Europe's energy policy. He explained that Europeans tended to view Russia with fear and disdain. Together with a lack of experience in dealing with Russia as a mature, senior partner, this has led to aggressiveness and rejection in dealing with it today. Mr. Kornblum also suggested that Moscow cares less about Europe than about getting the best deal for Russia and boosting the country's self-confidence as it emerges from a century of darkness and instability.

Noting that neither Russia nor Europe is politically unified — new EU member states have a more oppositional approach, for example — Mr. Kornblum warned against turning energy into the next chapter of this European–Russian saga. Instead Europe and Russia should address energy in a strategic economic dialogue without trying to define a broadly balanced relationship. The relationship is essentially unbalanced and this kind of "EU talk" is an exaggerated response to tensions, he said.

Securing Europe's energy supply

Andris Kesteris, head of office of the European Energy Commissioner, began the third panel by calling Russia the largest supplier of energy to Europe. He acknowledged East European worries about relations with Russia, but said it would be unwise not to cooperate with a country that controls big reserves and sits on Europe's border. However, European–Russian energy relations can only be deepened if they are based on reciprocal access to markets and infrastructure and on transparency in decision-making, he added.

Mr. Kesteris went on to say it would be shortsighted to rely on one supplier without making supply diversification central to EU and individual member state energy policies. This does not always mean

bringing pipelines from distant regions to Europe, he explained, citing as an example Commission proposals on renewable energy sources and energy efficiency. By promoting the development of new technologies, these measures will diversify supplies, reduce energy bills and create jobs on the continent.

He also pointed to the latest energy market liberalization package, which features ownership unbundling. By separating transmission from power generation and gas supply activities, the Commission aims to increase competition and ensure fair prices. In member states not prepared for unbundling, transmission assets of vertically integrated companies can be placed in an independent subsidiary. This legislation, Mr. Kesteris said, will enable Europe to open its national energy markets and create a single one, and in turn, give Europe a unified voice on energy issues.

The liberalization package also contains safeguards against abuses from outside Europe. Most notably, no foreign company will be allowed to gain control over European transmission networks. This should end the blackmail of member states that are forced to give up part of their networks in exchange for supply contracts with attractive prices. In a sign that the proposals do not exclude other countries from comprehensive access to the EU energy sector, the Union and a third country can agree conditions under which the acquisition of or investment in transmission networks can occur.

Then Fortum Chief Executive **Mikael Lilius** warned that energy demand would rise steadily — the expanded EU will need 1300 Kilowatt-hours in additional capacity by 2020 — and that dependency on fossil fuels would continue. As a result, greenhouse gas emissions will increase, too. He blamed the bleak outlook on policymakers and industry leaders who have put off investments in energy assets and relied on imports to meet Europe's needs.

In order to ensure security of supply, competitiveness and sustainability at the lowest cost to society, Mr. Lilius called for market-based solutions that provide incentives and disincentives. He welcomed the new proposals on unbundling, saying a larger, more competitive market would promote investment and add to overall energy security and market stability. While he strongly supports the Finnish model of transmission ownership, he is ready to let his company's stake go for the sake of greater openness and competition in Europe.

Energy and foreign policy

Concerns over climate change and Middle East terrorism have brought energy to the forefront of international politics, said Finnish Minister of the Environment **Paula Lehtomäki** in the last session of the day. The climate change debate has gained global urgency as fossil fuel use and carbon emissions in emerging economies climb. It is in Europe's interest, she said, to introduce energy efficiency technologies in these countries in order to minimize the environmental impact of their energy use.

Ms. Lehtomäki then drew attention to windfall profits in Mideast oil states, but contrary to popular belief said she sees no direct link to terrorism. Terrorism has a much wider range of national, religious and social factors, as Afghanistan, a terrorism hotbed with no oil, shows. Of greater concern, she said, is the unequal distribution of wealth generated from oil revenues. Citizens in oil autocracies have little say in how government or industry divides income and profit, and because of easy oil money, other sectors are neglected. This does not mean Europe should stop buying oil — no oil revenues could be far worse — but rather that the EU should promote these countries' social and economic development.

With an eye to Europe's backyard, Ms. Lehtomäki said it was important to integrate Turkey into the European Union and its trading area as that country becomes an energy hub. She also urged the EU to enhance energy security on its borders by exporting concepts of effective, competitive markets and affordable supplies to its neighbors. It can do this via the Energy Community Treaty — already agreed with Balkan countries and soon with Ukraine, Turkey and Moldova — and the Neighborhood Policy. Finally, because Russia is, and will remain, Europe's most important energy partner, Ms. Lehtomäki wants the major principles of the stalled Energy Charter Treaty for Eurasia included in a new Partnership and Cooperation Agreement between Moscow and Brussels.

Helga Schmid, advisor to the EU High Representative for the CFSP, said energy has long been a part of the EU's external relations, but mainly as an economic and environmental issue. Recently, however,

the European Commission and Council have made strides in integrating energy in foreign and security policies. She highlighted energy cooperation with Africa, saying energy poverty and its environmental impact, including deforestation and desertification, was a priority of the EU–Africa strategy. She also pointed out that the German EU Presidency implemented a first-ever strategy on Central Asia, which balances energy relations, human rights and the rule of law. But on Iran, she was less optimistic. The country desperately needs European investment and technology, but the nuclear standoff has brought dialogue to a halt. Long-term peace in the region is the only way forward, she said.

Ms. Schmid denied that energy’s growing role in foreign policy reflects a betrayal of EU values. All foreign policy strategies, she emphasized, are rooted in the bloc’s values of rule of law, good governance, multilateralism and respect for human rights. These in turn promote legal predictability, transparency and partnership, which benefit energy producers and consumers alike.

The panel concluded with comments from Mr. Singh on what he sees as the link between energy and terrorism. Oil prices in the 1970s sparked a revival of Islam that turned violent in some places, he said, and the legitimization of terror by the Pakistani army cemented the link between terror and energy flows. Thirty years later, a gambit of foreign and security policies still grapples with this. Mr. Singh then attributed three decades of war and violence in Afghanistan to its potential as a transit point for Central Asian sources. In light of confrontation with Iran, Afghanistan has become even more important as a potential transit country. But Mr. Singh is not hopeful that it can fulfill this role; he expects jihadists to further destabilize the country.

Mr. Singh ended his remarks by calling for greater dialogue between the EU and India on energy issues. Europe can help India increase the share of renewable energy in its mix, implement cleaner coal technologies, and expand nuclear power output. And as the largest democracy able to ensure its energy and economic security, India can help stabilize West and Central Asia by providing a model for the region and encouraging moderation in neighboring countries. It can also protect supply routes there.

Nordic versus German policy approaches

The final day began with a panel on Nordic and German policy approaches. **Matti Vuoria**, president and CEO of Varma Mutual Pension Insurance Co. and a former trade ministry official, reviewed EU progress on energy through the lens of Finnish experience, concluding little has been achieved since the mid-Nineties.

When Finland joined the EU in 1995, it was prepared for the completion of the internal market and the application of competition rules to the energy sector, a stance typical of newer, smaller member states. Drivers of Finnish policy believed in the virtues of Europe's open, efficient markets and accordingly opened their energy market — they expected access to energy without necessarily owning the means, as is the case with other goods. More than a decade later, however, Mr. Vuoria thinks this was a mistake; those who preserved capacity at the expense of the bigger picture have fared better than those who believed the EU could open gas and electricity markets to greater competition.

Why could it not? Mr. Vuoria blames the unwillingness of bigger member states to allow Brussels to forge a common approach to energy. Because of these states' national positions, EU free-market laws do not apply to energy supply and demand, as they do in other product and service markets. So while energy companies can move freely in the EU, energy products cannot. The results, he said, are higher prices and a threat to Europe's competitiveness in the global economy.

Mr. Vuoria praised his country's openness to various forms of primary energy, including nuclear, as a way to lower prices and keep Finnish industries competitive. He said that Finland's support for nuclear power is rooted in democratic decision-making and is environmentally responsible. Nuclear power also helps create the economic growth and welfare required for broader environmental sustainability, he added.

In his response, German Environment State Secretary **Matthias Machnig** said the important question was not one of supply and demand, but rather how Europe should restructure energy and industrial production in order to reduce dependency on imported fuels and meet emission targets. For him the answer is innovation. He called for an integrated approach to energy and climate change that would boost investment in energy efficiency and renewable energy technologies

in the “green” sector. According to a new study by Roland Berger Strategy Consultants, the green sector will see a turnover of a trillion Euros by 2030. Therein lies Europe’s chance to improve industrial energy efficiency and pioneer renewables, he said.

Mr. Machnig recognized that renewables cannot alone meet Europe and the world’s soaring energy needs. However, he rejected nuclear power as a quick fix on the grounds that it could not sufficiently raise global energy production or reduce emissions. Today’s 439 nuclear power plants account for less than 5% of total energy and 16% of electricity production; the IPCC estimates an additional 3000-4000 would be needed to have an impact on emissions. The capital required to raise output enough to power the world and cut emissions does not exist. Mr. Machnig would like to see the capital that is available go toward cleaning fossil fuel plants — he believes coal can and should be a sustainable energy source — and research and development.

He went on to refute claims that Germany is an obstacle to a common EU energy policy. He defended the country’s resistance to unbundling, as advocated by the Commission, by saying that “unbundled countries” cannot demonstrate greater energy investments than in Germany.

Outlook for the European Union

At the end of the conference, participants gave Mr. Gretschnann recommendations for a common European energy policy. Mr. Gretschnann, whose portfolio at the Council includes the issue, began the exchange with observations about the state of play:

- European energy policy is dominated by national interests
- No one in Europe openly discusses the geopolitics of energy
- The rest of the world talks about energy differently than Europe does — Europe’s approach may indeed be too Eurocentric

Mr. Machnig again said technological innovation would be key to securing supplies, lowering prices, combating climate change and, ultimately, staying competitive. He encouraged cooperation with Europe’s partners, especially the United States, in bringing new technologies to market. Mr. Machnig admitted nuclear power could play a role in ensuring a reliable energy supply, but quickly added that it was not the answer.

Ambassador Kornblum suggested energy would be the defining issue of Europe's future. Can the EU put together energy, the environment and foreign policy in a way that makes the bloc stronger and more coherent? This question, he said, has less to do with restructuring energy and industrial production than with whether Europe can transcend its post-war design — slow moving, egalitarian, highly regulated — in order to secure its energy future. Mr. Kornblum has hope. He thinks Europe's ability to harmonize different viewpoints through negotiation will help, but Europe must first overcome the post-war traditions that have muted strategic vision. Although the United States has a different approach to the issue, it shares Europe's energy concerns and will be a more cooperative partner in the future, he added.

The editor-in-chief of *Russia in Global Affairs*, Fyodor Lukyanov, gave an overview of Russian thinking on the West and what this means for EU–Russian relations. Since late 2006, he said, Russia has sought to consolidate its policies rather than integrate into Western structures. It does not consider the EU the final form of political and economic order on the continent and thinks individual states may one day usurp the power of the supranational institutions. Therefore, Moscow believes it neither possible nor necessary to conclude broad agreements with the Union today. Mr. Lukyanov recommended pursuing a pragmatic approach to relations with Russia instead of emphasizing mutual dependence and shared interests. He said the reciprocity clause of the latest energy market liberalization package was a step in the right direction, as long as the two sides agree on what this means in practice.

Finally, **Peter Lund**, professor in advanced energy systems at the Helsinki University of Technology, said EU–Russian relations were not in crisis, but rather laden with misunderstandings as both sides use energy to distract from domestic problems. To prevent the further politicization of energy, he called for a common energy policy with Russia that would increase dialogue, trade and exchange of European know-how for Russian gas imports. Like other conference participants, Mr. Lund believes climate change to be a tremendous opportunity for Europe, which has the expertise and industrial capacity to bring cleaner, more efficient technologies onto the world market. Mr. Lund ended by saying the foreign policy dimension of energy should be about more than securing supplies abroad. The EU should form partnerships with its neighbors in order to address common energy concerns and tackle climate change.

CONCLUSIONS

- ✓ Energy will define Europe's future and require greater strategic thinking
- ✓ European energy policy has long been inward-looking and dominated by competing national interests
- ✓ Any common policy should integrate energy and climate change and promote investment in energy efficiency and renewable energy technologies — Europe can lead the way
- ✓ The EU should approach relations with Russia pragmatically and increase dialogue, trade and exchange of know-how for energy imports
- ✓ Cooperation with the United States and neighboring countries is important in tackling global energy and climate change concerns

