



Sustainable development goals in the context of long-term energy policy

By Alexander Novak
Minister of Energy, the Russian Federation

The concept of sustainable development first appeared as a result of merging of three major perspectives: economic, social, and environmental. When introducing the term “Trilemma,” the World Energy Council wanted to highlight the complex interrelationship between these three domains. The social equality is meant to encompass the physical and economic accessibility of energy for all people. WEC’s 2011 report *Policies for the Future* stated that not a single nation has yet been able to reach the ideal equilibrium between these three components of energy sustainability. Does this mean that the problem is insoluble?

Let us first briefly overview the existing facts and trends in this sphere, with special emphasis on greenhouse gas emissions, energy poverty, and application of renewable energy sources (RES). About two-thirds of global emissions are related to the production and consumption of energy. Over the past 20 years, the volume of global consumption-related emissions has increased from 21.5 to 31.5 billion tonnes of CO₂, which means a per capita rise from 4.1 to 4.6 tonnes; though it is a slight reduction in GDP terms: a drop from 0.58 to 0.44 kg per each US dollar of global GDP (in 2005 US\$ PPP).

According to the World Bank, the current level of energy poverty is associated with the 1.2 billion people not having access to electric power and 2.8 billion people to living without modern fuels. This problem is especially acute in the Asia Pacific region (APR). Experts assess that over 600 million of APR residents don’t have access to electricity at all, far from any sustainability. This in turn has a negative impact on resolving the essential social issues of the region.

The elimination of energy poverty, as estimated, may increase global energy consumption and emissions by as little as 1 per cent (at present, the poorest countries, with 12 per cent of the global population, account for 1 per cent of energy consumption). So far, the trends are not particularly encouraging: the share of people with access to electricity rose from 75.5 per cent to 83.1 per cent, and that of people with access to modern fuel increased from 47.5 per cent to 59.5 per cent.

The share of renewables in power generation has increased from 20.1 per cent to 20.6 per cent over the last 20 years. But if we look at the most rapidly developing kinds of RES (net of hydro power) their share has increased more than 3 times (from 1.2 per cent to 3.8 per cent), and electricity generation in absolute terms has surged more than 5 times.

On the whole, in 2010 global energy sustainability

investment stood at US\$400 billion. And this amount has to be increased 2-3 times in annual terms to meet the goals of the relevant initiative set forth by the UN Secretary General by 2030 (universal access to modern energy services, a twofold increase in global energy efficiency growth rates, and doubling of renewables share in the global energy mix).

It is clear that the main component of the Trilemma is energy security – unless this is guaranteed, all other good intentions fade into insignificance. I would like to highlight the fact that it is Russia that has been promoting global energy security in various international fora since the Saint Petersburg G8 Summit in 2006. The main points reflected in the final declaration of the Summit and the Action Plan adopted by the G8 leaders at that time include: first, to effectively address three interrelated issues – energy security, economic growth, and environmental protection (the “3Es”); second, to strive for our shared multiple objectives of reducing greenhouse gas emissions, improving the global environment, enhancing energy security, and cutting air pollution, in conjunction with our vigorous efforts to reduce energy poverty.

Russia continues to pursue its efforts to provide global energy security by means of, inter alia, raising the issue at APEC (the Asia Pacific Energy Forum), Gas Exporting Countries’ Forum, and G20 Summits. It is common knowledge that, back in December 2012, the UN General Assembly unanimously declared 2014-24 the Decade of Sustainable Energy for All. Hence a lot of attention will be devoted to this priority in the upcoming years including during Russia’s hosting of the International Energy Forum (IEF) and World Petroleum Congress (WPC) in 2014.

In addition, given the growing disequilibrium in the energy markets, and increasing conflict, Russia came up with a proposal to adopt an International Convention on Energy Security in 2010. It considers energy security to be one of key factors of building a system of efficient energy supply, and a prerequisite for sustainable economic and social development at all levels. New principles of international energy cooperation, based on the perspective of energy security, underlie the Draft Convention. These principles may facilitate greater confidence among market participants in the event that a sufficient number of states join it and abide by the provisions.

As regards Russia’s national energy policies, they are fixed in a publicly accessible document titled *Energy Strategy of Russia*. The current energy strategy (ES-2030) is valid till 2030

and places emphasis on energy and environmental security. Energy-related social policies also represent one of the pillars of ES-2030 that has the objective of promoting social partnership between energy companies and society, as well as reproduction of human capital in the energy sector. One of the strategic goals of our foreign policy is to employ Russia's energy capability to maximum effect to get fully integrated into the global energy market, strengthen our positions and obtain maximum benefit for the national economy.

The Russian Federation participates in international efforts to reduce the level of energy poverty, contributing to international development. Russia has donated more than US\$3 billion over the last 10 years in the framework of promoting development goals.

Having the largest energy capacity in the world, Russia can submit for international consideration the issue of establishing transnational energy infrastructure that would guarantee reliable energy supplies to areas with energy production deficit. This is of special relevance for the APR as high economic growth rates and population increase bring about greater energy consumption. Experts project that energy demand will increase twofold by 2030. We are increasing the capacity of the Northern Sea Route and this will allow us, among other things, to provide new, shorter, and much more beneficial routes for energy supplies. APR countries will be playing an ever growing role in the global energy demand structure. They will become the focus of producers of hydrocarbons from the Middle East, Russia, Canada, Australia and East Africa.

New technologies for extracting shale oil and gas may become common across the globe in future, though it will take time because of the well-known technological, legal, infrastructural, environmental, and political obstacles. Nevertheless, the new sources will have a critical impact on global energy flows, since production may move very close to areas of consumption. Apart from that, the number of LNG importing countries is expected to double in the upcoming 10 years and the supplies will increase by more than a half. Eventually, these factors will contribute to greater energy security, which is in the interest of both producers and consumers.

What will a specific and attainable balance of interests depend on? Most importantly, on a well-

conceived assessment of alternative development scenarios (for each of the pillars of the Trilemma, both separately and in conjunction), and on the adoption of coordinated decisions aimed at abandoning the most undesirable scenarios and attaining the most desirable ones.

We attach huge importance, therefore, to cooperation on energy scenarios and engage in it in the framework of EU-Russia Energy Dialogue and our interaction with IEA, and lately, with China and to a certain extent with the US. The more reliable and transparent our energy scenarios are, the broader and more objective our analysis of promising global and regional energy trends will be, and the higher chances we stand to adopt and implement mutually beneficial decisions in this essential area.

With this in mind, the focus on sustainable development in the context of long-term energy policies could be complemented with, for instance, introducing the elements of economic growth and energy efficiency to the Trilemma. It is noteworthy that energy efficiency measures provide extensive fifth fuel opportunities. Experts believe that by 2030 energy efficiency-related savings may reach between US\$250 and US\$325 billion; this would also allow for the reduction of greenhouse gas emissions by 12 per cent to 17 per cent compared to the baseline scenario. In this way, we believe we will be able to make headway toward the noble goal of achieving sustainable energy development. □

Increasing the transport capacity of Russia's energy infrastructure

