Indeed, the international community has become increasingly divided over the role of nuclear deterrence, the vision of nuclear disarmament and the commitment of states to arms reduction, and the steps required to prevent nuclear weapons use. For these reasons, NTI in 2018 launched the Global Enterprise to Strengthen Nonproliferation and Disarmament (GE)—a multi-year initiative to facilitate a sustained, integrated, and creative dialogue to advance shared interests in support of the NPT’s goals.

IAEA announces support for COVID-19 effort

The International Atomic Energy Agency (IAEA) will provide diagnostic kits, equipment and training in nuclear-derived detection techniques to countries asking for assistance in tackling the worldwide spread of the novel coronavirus causing COVID-19. Fourteen countries in Africa, Asia, Latin America and the Caribbean have requested assistance with the diagnostic technique, known as Real-Time Reverse Transcription Polymerase Chain Reaction (RT-PCR). “The Agency takes pride in its ability to respond quickly to crises, as we did in the recent past with the Ebola, Zika and African Swine Fever viruses,” IAEA Director General Mariano Grossi
said in a statement to the IAEA Board of Governors. “Contributing to international efforts to deal with the coronavirus will remain a priority for me as long as the outbreak persists.”

RT-CPR can help detect and identify the novel coronavirus accurately within hours in humans, as well as in animals that may also host it.

The first training course in detection techniques will take place at the Joint IAEA/Food Agriculture Organisation of the United Nations Animal Production and Health Laboratory in Seibersdorf, Austria, in two weeks’ time and will include medical and veterinary experts from Cambodia, Republic of Congo, Cote d’Ivoire, Ethiopia, Kenya, Madagascar, Malaysia, Mongolia, Philippines, Sri Lanka, Thailand and Viet Nam, the IAEA said. Additional regional courses will be organised for other countries, including from Latin America and the Caribbean.

Participants will be trained in biosafety and biosecurity procedures to protect health and veterinary workers during sampling and analysis and to prevent further external contamination. They will immediately receive emergency toolkits with personal protection equipment, specific diagnostic reagents and laboratory consumables. A number of national laboratories will also receive additional equipment, such as bio-safety cabinets and RT-PCR devices.

Veterinary experts are being included in the training in an effort to increase countries’ preparedness in the early detection of viruses that cause zoonotic diseases – diseases originating in animals that can spread to humans. They will be trained to test domestic and wild animals implicated in the transmission of coronaviruses, such as the new strain SARS-CoV-2 causing COVID-19, and others that cause Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory
Syndrome.

The assistance to countries in tackling COVID-19 is delivered through the IAEA’s technical cooperation programme, which supports the peaceful application of nuclear technology in areas such as human and animal health. It is funded through the IAEA’s Peaceful Uses Initiative.

Researched and written by World Nuclear News

NTI Holds 10th Meeting of the Global Dialogue on Nuclear Security Priorities in Düssedorf, Germany

NTI convened the 10th meeting of the Global Dialogue on Nuclear Security Priorities outside of Düssedorf in Velen, Germany on November 5-6, 2019. The meeting was attended by government officials from 15 countries, representatives from the International Atomic Energy Agency (IAEA), the United Nations, the European Commission, and the World Institute for Nuclear Security (WINS), as well as industry and non-governmental experts from around the world.
Nuclear energy can bridge the skills gap in Africa, says Rosatom DG

Speaking to African heads of state and representatives from Russian, African, and international business and government agencies, Rosatom Director-General Alexey Likhachov yesterday emphasized the benefits of nuclear energy in job creation and regional economic development. At the Russia-Africa Summit in Sochi, Russia, Likhachov said global inequality in technological, industrial and socio-economic development was “acutely felt” in Africa.

During a roundtable session titled The Contribution of Nuclear Technologies in the Development of Africa, he said these challenges “demand immediate solutions,” which nuclear technology “can fully respond to.”

“We are talking about solutions related to raising the level of education, energy security, applying nuclear solutions to medicine, agriculture, as well as other scientific research and development. Every dollar invested in our projects in any country, brings two dollars in localisation to that country. This significantly increases the country’s GDP,” he said.

Rosatom said a job is created for every 0.5 MWe of electricity produced at a nuclear power plant, meaning that a 1000 MWe plant employs more than 2000 people. Human capital development is both “a condition and a consequence” of nuclear power plant construction projects, it added.

Through joint educational programmes, the Russian state nuclear corporation is attracting applicants from African countries to its partner universities in Russia, it said, and
Rosatom has already awarded up to 50 scholarships to students from Rwanda and Zambia. They are among hundreds of other African students from countries such as Algeria, Egypt, Ethiopia, Kenya, Nigeria and South Africa, it added.

**Development**

Claver Gatete, Rwanda’s minister of infrastructure, said: “In order to grow our industries from 17% GDP to 30% GDP, and to achieve our ambition of becoming a high-income country by 2050, we want to take advantage of nuclear to enhance our socio-economic development.” Rwanda sees a clear link, he said, between nuclear technologies and the country’s vision of development.

Citing data from the World Economic Forum, Rosatom noted that 15 to 20 million young people are to enter Africa’s workforce in the next two decades, meaning that 15% of the world’s working-age population will be in Africa, with 60% under-25s.

Roland Msiska, head of the Zambia Atomic Energy Agency, said prospective nuclear projects would create “exciting training opportunities” for the country’s young people, both locally and in Russia, and ensure “long-term stable employment and development.”

“Most of our plans in Africa are short-term. You cannot do short-term planning in nuclear science. At a minimum, you are looking at a 60-year horizon. Such inter-generational long-term planning is essential for sustainable development,” he said.

According to a report produced by Rosatom and WorldSkills Russia, titled *A Global Challenge for One Billion Workers*, “a skills mismatch” already affects 1.3 billion workers, whereby an individual is either over- or under-qualified for their role. This means that training opportunities are crucial, not
only in Africa but globally, it says.

Citing the International Monetary Fund, Rosatom noted that 6% of the world’s GDP – USD5 trillion – is lost every year owing to the increasing gap between skills supply and demand.

The Russia-Africa Summit “marks an important step” towards developing trade and economic relations between them, Rosatom said. “Nuclear energy is just one aspect of this relationship, but a promising one, not only to ensure power supply but also to provide long-term and stable employment for Africa’s growing population.”

Agreements

Likhachov and Gatete yesterday signed an agreement to construct Rwanda’s first Centre for Nuclear Science and Technology, which will enable the production of radioisotopes for widespread use in industry and agriculture as well as in healthcare, thus addressing the issue of lack of cancer treatment, Rosatom said. It is expected to comprise a multi-purpose research water-cooled reactor with a capacity of up to 10 MWe.

Likhachov had the previous day signed an agreement on cooperation in the peaceful uses of nuclear energy with the Ethiopian minister of innovation and technology, Getahun Mekuria.

Yesterday, Rosatom also signed a Memorandum of Cooperation with the People’s Friendship University of Russia to work on promoting Russian nuclear education abroad, mainly in African countries.

Economic support

During the Russia-Africa Economic Forum that also took place in Sochi this week, Russian President Vladimir Putin said that
Rosatom is ready to create a nuclear industry for its African partners, on a turnkey basis, and construct research centres based on multipurpose reactors.

He noted that Rosatom is already building a 4800 MWe nuclear power plant with Egypt, working on nuclear cooperation with other countries on the continent, such as Zambia, and is signing agreements for co-operation with other countries, including Ethiopia and Rwanda.

Putin said the construction of a Russian “industrial zone” in Egypt was nearing completion.

“This is a large site in the economic zone of the Suez Canal, where companies from Russia will be able to localise their production facilities. About 20 Russian enterprises are planned to be connected to this work, and this is only 20 enterprises now: I am sure that there will be more,” Putin said, according to media reports.

To ease the debt burden of African countries, Putin said, write-offs now exceed USD20 billion and will enable funding of economic growth projects.

African countries are attracting more and more attention from Russian business, he said, largely because Africa is becoming one of the centres of global economic growth with a combined USD29-trillion GDP forecast by 2050.

Russian-African trade has more than doubled to surpass USD20 billion, he said, but the potential is far more enormous, given that USD7.7 billion of this, or 40%, is with Egypt alone.

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Russian Energy Week discusses role of nuclear in SDGs

Delegates at a plenary session of Russian Energy Week taking place this week in Moscow discussed how nuclear power is an “inalienable element of the sustainable development agenda”. The session, which was hosted by Russian state nuclear corporation Rosatom, included panellists from Belarus, Egypt, Hungary and the UAE, as well as from the International Atomic Energy Agency (IAEA).

They discussed the key effects and values of nuclear power technologies, their impact on the quality of life of people, the main barriers to their development, and their role in achieving the United Nations’ Sustainable Development Goals (SGDs). Rosatom published a summary of the discussion on 2 October.

The session was moderated by Thomas Blees, president of the Science Council for Global Initiatives, who referred to International Energy Agency data that shows nuclear power is the second largest low-carbon source of electricity in the world, with nuclear power plants accounting for 10% of global electricity production.

Alexey Likhachov, Rosatom director general, said that energy systems must become more flexible and client-centric to meet consumer needs.

“The global nuclear industry today is becoming a factory of new technologies. These are IT-technology, supercomputers and new materials. These are nuclear medicine and new types of power generation, including wind energy. We not only see the modern agenda and participate in it, we form this agenda. And
new technologies are what makes people’s lives better, more comfortable and safer,” Likhachov said.

Viktor Karankevich, minister of energy in Belarus, said unit 1 of the country’s first nuclear power plant, under construction in the Grodno Region, is “already in a high stage of readiness”, and installation of equipment continues on the second unit.

“The commissioning of nuclear power plants will make it possible to meet about one-third of [our] energy demand and will have a positive impact in terms of reducing emissions and reducing greenhouse gas effects,” the minister said.

Péter Szijjártó, Hungarian minister of foreign affairs and trade, said his country’s project to expand the Paks nuclear power plant is “one of the best economic decisions [it’s made] in recent years”.

“We consider the construction of nuclear power plants in Hungary not just as a construction project, but as a general concept for boosting the country’s economy to a higher level – for example, highly qualified specialists, about 1000 new jobs, infrastructure development,” he said.

A global approach to tackling climate change is not feasible without nuclear energy, the panellists said, since nuclear power minimises the emission of CO2 into the atmosphere. In addition, nuclear power plants are national-scale infrastructure projects with significant developmental effects for both the industrial sector and the local population, they said.

The session also included Mohamed Al Hammadi, CEO of Emirates Nuclear Energy Corporation, Amged El Wakil, director of Egyptian Nuclear Plants Authority, Bernard Fontana, CEO of Framatome, and Mikhail Chudakov, International Atomic Energy Agency (IAEA) deputy director general and head of its Department of Nuclear Energy.
According to the IAEA, nuclear technologies – used for energy, human health, food production, water management and environmental protection – contribute directly to nine of the 17 SDGs set out in the United Nations 2030 Agenda for Sustainable Development.

Russian Energy Week is an annual event for discussion of the main developments and challenges faced by the gas, oil, coal, petrochemicals and electricity sectors.

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