

Second Asian and the Pacific Energy Forum

3-5 April 2018

UNCC CR-2

Bangkok, Thailand

REMARKS at

Ministerial Segment

(4 April 2018, 11:00)

Mikhail CHUDAKOV

Deputy Director General and

Head of the Department of Nuclear Energy



IAEA

International Atomic Energy Agency

Your Excellencies, Dear Colleagues,

It is very refreshing to listen to all your efforts and initiatives. Wherever I go, I hear similar problems. And I hear often “We should work together, we should join hands!” I will try to briefly show you how we do this at the IAEA.

We have gone through a mapping exercise at the IAEA. The result was very encouraging: The Agency contributes directly to the achievement of 9 of the 17 Sustainable Development Goals. And indirectly probably to all of them.

But I will focus on 7, 9, 13: Energy, industry and climate change.

Last October, ministers from many nations, both users of and newcomers to nuclear power, emphasized at a conference in Abu Dhabi why they look to nuclear power.

They want to improve their energy security. And they want to achieve the SDG, including fighting climate change.

Today the 450 operational reactors provide about 11% of the world’s electricity. In fact, this corresponds to a **THIRD** of the **LOW CARBON** electricity production. And this, with an extremely high rate of performance and availability.

The Paris Agreement on Climate Change and the SDGs are inseparable: If we want to reach the 2C goal, we must decarbonize the energy sector.

And we can only do this by giving the Member States the right information. It is important for them to understand that hydro, nuclear, wind and solar will all be key parts of the global energy mix, if we want to achieve a low carbon economy.

Your Excellencies,

There are some who want to push the world to making a choice: renewables or nuclear?

We believe that is the wrong approach.

The issue is NOT “**renewables VERSUS nuclear**”.

The issue is “**renewables AND nuclear**” VERSUS high carbon energy sources.

In fact, serving as the baseload energy source, nuclear helps renewables integrate more into the system.

Today, we have 30 countries operating nuclear power plants. About 30 more are interested in including nuclear power in their energy mix. We continue to help those newcomers, with a very detailed guidance, that they establish successful programmes.

From your region, Bangladesh started constructing its Rooppur Nuclear Power Plant last year; Indonesia, Malaysia, Thailand and Viet Nam have invited us to review their infrastructure development.

Here, I should emphasize: We do not influence decision making on whether or not to opt for nuclear power.

But we do help countries make a KNOWLEDGEABLE DECISION, and if they decide to do so, then we help them establish safe, secure and sustainable nuclear power programmes.

One big area we offer help is through our energy models, which Member States can use in updating their Nationally Determined Contributions.

Our energy modelling tools do NOT favour any energy source, and are used by almost 150 Member States and 21 international and regional organizations. *(this testifies their wide acceptance, considering there are only 30 operating + 30 interested countries...)*

The Global SDG7 Conference was held just 2 months ago, here in Bangkok. My teams have highlighted how our energy planning allows governments to make timely, informed decision about managing energy demand and supply.

And we are working with many countries from your region on this. Again, irrespective of your decision to go or not to go nuclear!

Your Excellencies, Ladies and Gentlemen,

We are talking about energy transition. For this, we need innovation in technology. We need innovation in financing. We need innovation in regulation.

I will just highlight how innovative technologies will further reduce greenhouse gas emissions and extend the role of nuclear power into new applications:

Nuclear cogeneration is gaining interest. This is when you use a power reactor for producing industrial heat, hydrogen, petro-chemicals and desalination of water.

Small and Modular Reactors, the so-called SMRs, are picking up a lot of interest lately. There are over 50 designs and concepts, and 3 SMRs¹ are currently under construction in the world. They could offer options for remote regions with less developed infrastructure.

There is promising work on fast neutron reactors, gas cooled reactors, and in fusion, and the IAEA serves as a collaboration platform.

Let me finish by highlighting how immense the challenge is:

Today, 70% of electricity comes from burning fossil fuels.

To reach the 2 degree goal, we need a radical shift: by 2050 around 80% of electricity will need to be low carbon.

How do we get there?

If nuclear power deployment doesn't grow in line with this scenario, the other technologies will not make up the gap. And we will not meet our climate targets that are critical to life on this planet.

Increasing access to energy is the key to lifting people out of poverty.

I will be happy to elaborate more if you have any questions on how our activities support you and the SDGs.

Thank you.

¹ Argentina- CAREM, China- HTR-PM and Russia- KLT40s