

21st INPRO Dialogue Forum

**on the Deployment of SMR Projects
and Technologies to Support the SDGs
St. Petersburg, 28 August – 1 August 2023**



INPRO
International Project on
Innovative Nuclear Reactors
and Fuel Cycles

Session II(a) Current Status of SMRs in Energy Planning for Embarking Countries

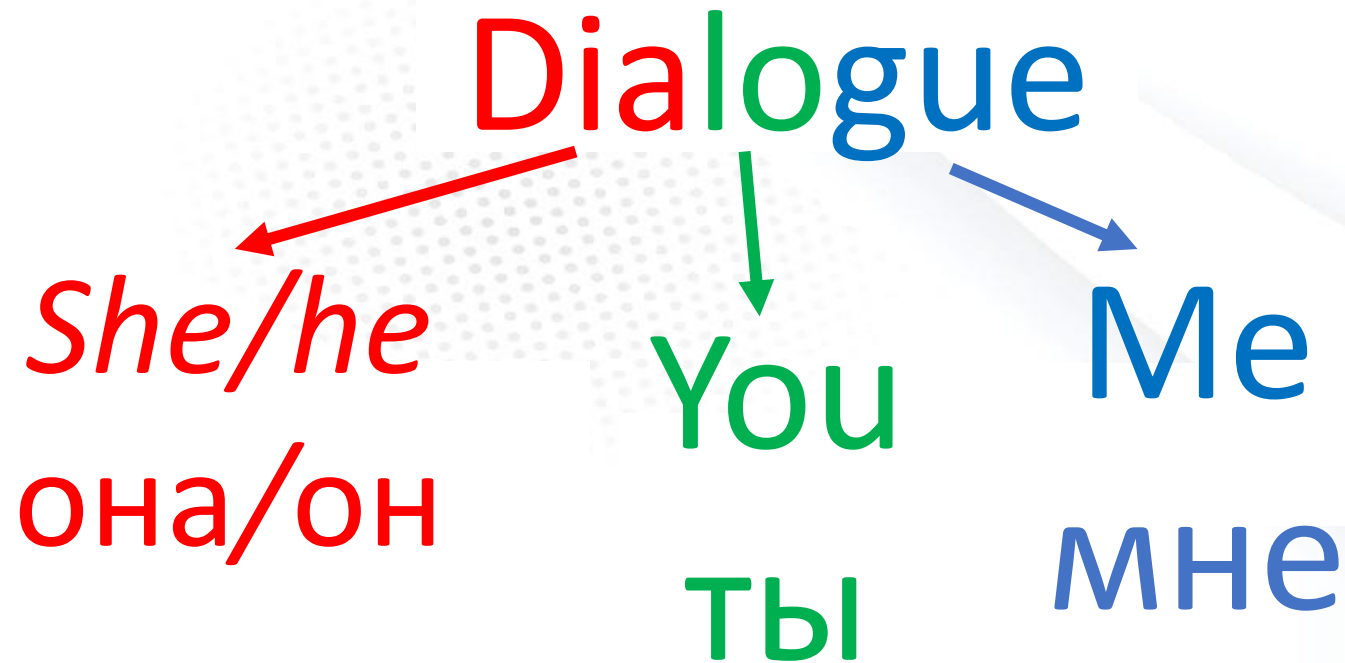
Chair: **Topan SETIADIPURA (BRIN, Indonesia)**

Research Center for Nuclear Reactor Technology
RESEARCH ORGANIZATION FOR NUCLEAR ENERGY (BATAN)
NATIONAL RESEARCH AND INNOVATION AGENCY OF INDONESIA

Topan Setiadipura
Professor Researcher / Head of Research Center



On 'dialogue' and Indonesia's Linguistic Perspective



So, our **INPRO Dialogue Forum** is not only about the importance of our each origin country but **its about the importance of all.**

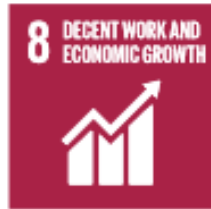
To do so, talking and listening to-each-other is important!

Importance of All → Sustainable Dev. Goals

Affordable energy reduces poverty (SDG1) and inequality (SDG10), and supports health (SDG3), education (SDG4), industry (SDG9) and economic growth (SDG8)

Energy for all fosters peace, justice (SDG16), and partnerships (SDG17)

Sustainable energy is crucial for climate action (SDG13), ecosystems (SDG14, 15), agriculture (SDG2), water (SDG6, 14), and reducing waste (SDG12)



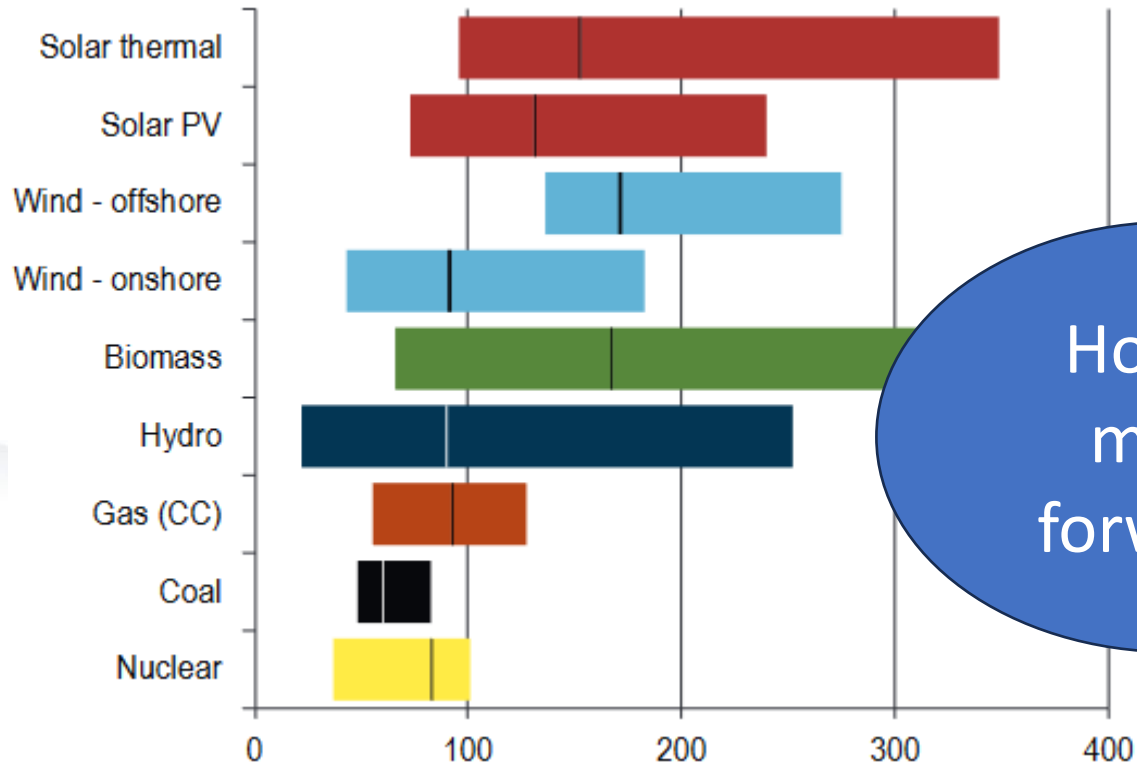
Reliable energy is essential for industry (SDG9), agriculture (SDG2), health (SDG3) and education (SDG4)

Modern energy supports clean communities (SDG11), health (SDG3), and gender equality (SDG5)

Nuclear Power for Sustainable Development, IAEA, 2017

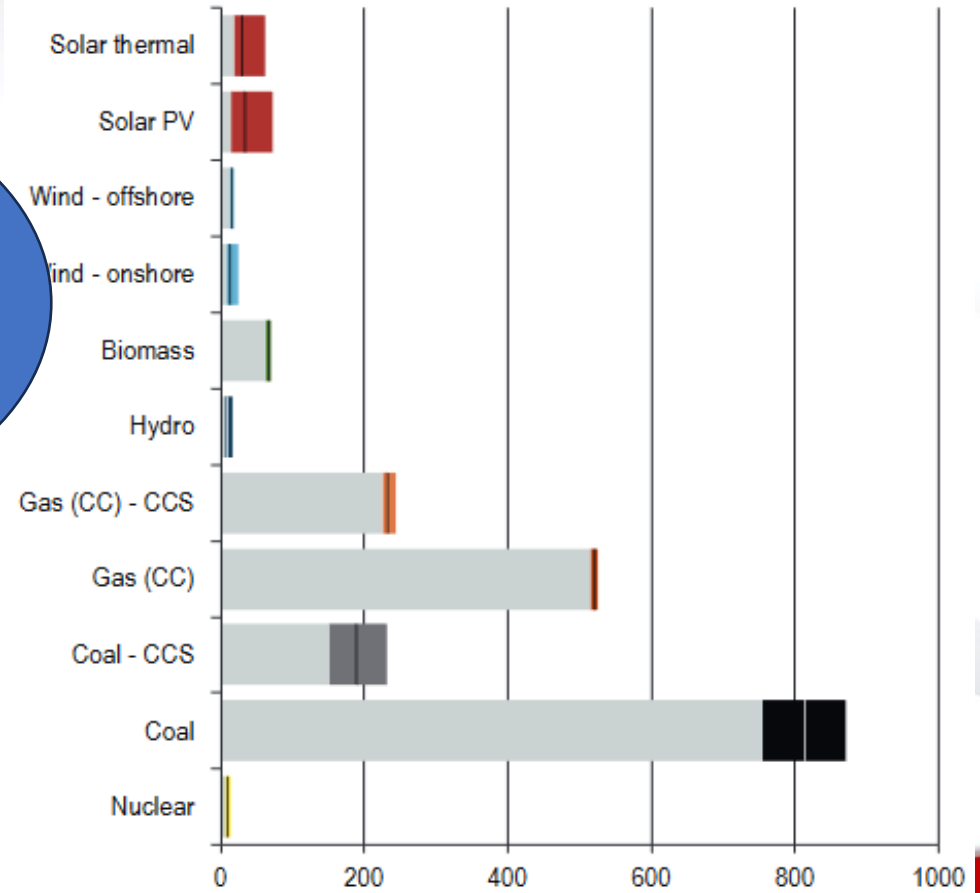
Nuclear Energy Sustainability: Cost & GHG Emission

Life cycle GHG emissions (in g CO₂-eq/kW-h) of electricity technologies, 2010. Colored ranges show regional low, average and high estimates, which can also vary considerably from site to site.



Levelized costs of electricity generation (US \$₂₀₁₃/MW-h) at 7% market discount rate. Bars indicate low, median and high estimates

How to move forward?



Nuclear Power for Sustainable Development, IAEA, 2017

Session II(a) Agenda

<i>Time</i>	<i>Topic</i>	<i>Presenters</i>
14:00	Session II (a) : Current status of SMRs in energy planning for embarking countries	Chaired by Mr SETIADIPURA
	- Opening Remarks (5-10')	Mr Topan SETIADIPURA BRIN, Indonesia
	- Analysis on the gaps and needs of the national regulatory infrastructure in the perspective of increased interest in SMR projects (15')	Mr. Ramin PASHAYEV, State Agency on NRAR, Azerbaijan
	- Present Status of Understanding and Deployment of Small Modular Reactor technologies in Bangladesh (15')	Mr. Shanjib KARMAKER BAEC, Bangladesh
	- Opportunities and Challenges of deploying SMRs in developing countries (15')	Mr Nader M. A. MOHAMED EAEA, Egypt
	- The status of nuclear power Development in Ethiopia (15')	Mr Kaleb Tadesse TEBELU MIN of Water & Energy, Ethiopia
	- SMR Contributions in Indonesian Net Zero Emission Program (15')	Mr Sidik PERMANA BRIN, Indonesia
	- Questions and Open Discussion (10')	All Participants

Session II(a) Agenda

16:00	Session II (a) : Current status of SMR in energy planning for embarking countries (<i>continued</i>)	Chaired by Mr SETIADIPURA
	- The development of SMRs in Jordan to support achieving sustainability goals (15')	Mr Tariq M. M. MHEIDAT JAEC, Jordan
	- The need for SMR in Lesotho and Role of SMRs with various functions and features in achieving SDGs (15')	Mr Mojalefa SELLO MIN of Infor., Comm., and STI, Lesotho
	- Libya's nuclear energy program and the feasibility of using SMRs to achieve the program's objectives (15')	Mr Musbah ALHENGARI LAEE, Libya
	- Questions and Open Discussion (15')	All Participants



Thank You!
Let's DiaLoGue