

insight

science for global

# Enabling Environment for Science, Technology & Innovation

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#### Nebojsa Nakicenovic

Deputy Director General & Deputy CEO International Institute for Applied Systems Analysis Professor Emeritus of Energy Economics Vienna University of Technology

Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs, UN Headquarters, NYC – 6-7 June 2016



IIASA, International Institute for Applied Systems Analysis



- **10-Member Group on Enabling Environment for STI**
- STI central to human development
- STI comes from many sources
- Emergence of "knowledge societies"
- Primary mechanism for achieving SDGs



Transformational nature of STI central to all SDGs





#### The World In 2050

SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK A GLOBAL INITIATIVE FOR THE UNITED NATIONS

Stockholm Resilience Centre Sustainability Science for Biosphere Stewardship





#### Transformational nature of STI central to all SDGs

http://www.iiasa.ac.at/web/home/about/news/150312-World-in-2050.html



#### UN President of the General Assembly High-level thematic debate on Achieving the SDG's 9-10am, 21 April 2016, GA Hall, UN



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### **Sustainability Transformation**

#### "Doing More with Less" within Planetary Boundaries

Vision: Sustainable Future

→ Growing number of actors of change:

- green businesses
- cities
- civil society
- science
- IGOs (UN etc.)

Legitimacy of BAU eroding

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 $\rightarrow$  New values and norms

→ 2050: Sustainability transformation

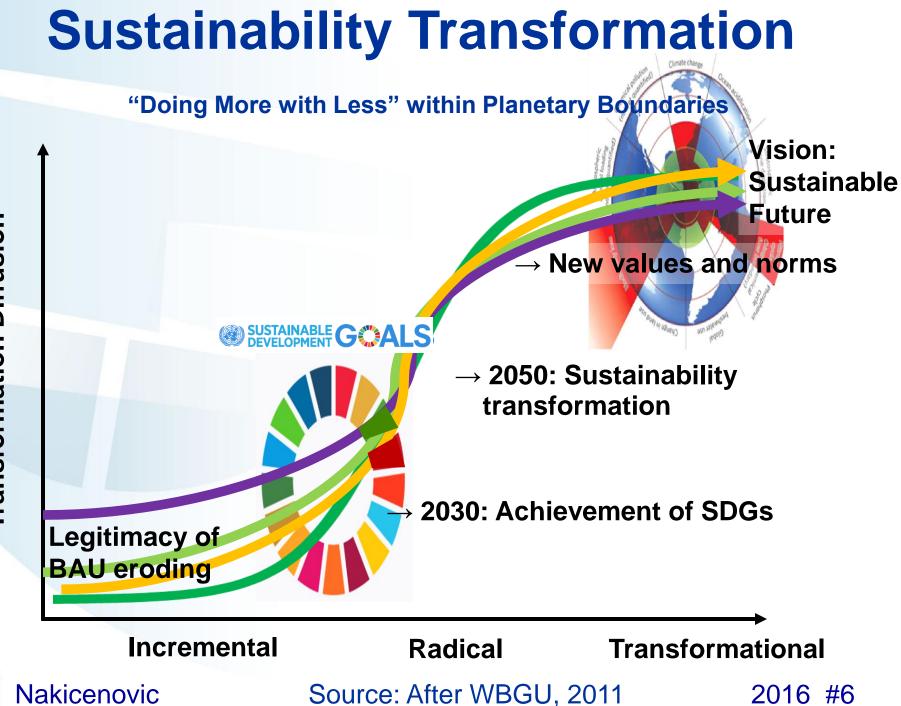
 $\rightarrow$  2030: Achievement of SDGs

Incremental

Source: After WBGU, 2011

Radical

Transformational



**Fransformation Diffusion** 

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# **Societal Action Plans and Roadmaps**

- Commit to develop national and international STI Action Plans and Roadmaps for achieving the SDGs
- Develop inclusive plans with input and participation from all sectors of society in every country
- Harness knowledge, insights, and advice from all sources.
- Assure periodic feedback and evaluation from the STI community
  - Check for policy coherence
  - Check for SDG coherence
- Create real "learning societies."

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# **Strengthening STI-Policy Interface**

- Multiple-benefits from strengthening the STI-policy interface
- Use fact-based scientific advice to support decisions
- How?
  - Create a "science advisory system":
  - use high quality, fact-based, and credible scientific advice from diverse sources,
  - free of politics and special interests, and
  - independent of (government) control.

International Network of Government Science Advice

<u>http://www.ingsa.org/</u>, launched by ICSU in 2014

# **STI Policy Coherence**

#### Paradox of STI:

- cause of problems, e.g. as negative externalities
- but solution, if socially and environmentally sound
- Key to
  - Understand inter-relationships and interdependencies
  - identify trade-offs and inherent in STI for SDGs (nationally and globally)
  - Ieverage synergies among STI policies and SDGs
- Tools to support policy coherence:
  - integrated assessments
  - systems thinking



# THANK YOU

# naki@iiasa.ac.at

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