

#### Name & Position

# Jurgis Kazimieras STANIŠKIS

Full member of Lithuanian Academy of Sciences

Doctor Habilitat, Professor,

Head of research at the Institute of Environmental

Engineering, Kaunas University of Technology (1991)

Director of the Center for Sustainable Industrial development (2003)

Background: system engineering, biotechnological and environmental process control/management



### Experience in SD

- Resource efficient and Cleaner Production (1992)
- Preventive management
- Sustainable innovations and financing (CBA)
- Industrial symbiosis
- LCA and eco-design
- ▶ CSR/ socially responsible organization/university Manager/Lead expert of more than 90 international projects (incl. UNEP/UNIDO) together with foreign partners in Europe, CEEs, Africa, South East Asia, Latin America, Russia, Ukraine, Belarus, etc



# Possible Approach to the GSDR (I)

#### Two main reasons of Global Development crisis:

- Technological development (third revolution)
- Macroeconomic system (free market based)

#### **Proposed solution** (GSDR 2016 report)

- Fourth technological revolution (new generation)
- Some political changes

"We cannot solve our problems with the same thinking we used when we created them"

"It has became appallingly obvious that our technology has exceeded our humanity"

"Only two things are infinite, the universe and the human stupidity, and I'm not sure about the former"

**Albert Einstein** 



## Possible approach to GSDR (II)

- There are no risk-free technologies !!!!!!!!!!!!
- Emerging technologies for SDG have even higher adverse impact to human and ecosystems or information doesn't exist
- Free market economy based on profit (not quality of life) and competition (not collaboration)
- GDP is wrong indicator

Are we going to raise crucial for SDG questions or just incremental steps/innovations towards sustainability??????



## Thematic contribution(I)

 Technology explicitly refer to 14 targets and another 34 targets relate to issues that are most often largely discussed in technology terms (total – 48 targets).

(personally: goals 4, 6, 7, 8, 9, 11, 12)

- Three targets: (I) significant overall technology improvement; (II) universal access to sustainable technology; (II) global effective innovation system for sustainable development.
- Technical, economical, environmental, social, cultural feasibility has to be performed before implementation of all new technological decisions.



## Thematic contribution (II)

The role of technology for SDGs is critical because it has greatly shaped society, economy and environment and *visa versa*.

#### According systems theory:

- Technology and free market economy based on positive feedback and always lead to instability;
- 2. Existing technological and macroeconomic boundaries and limitations doesn't provide the solution for sustainable development;
- Existing sustainable development methods could provide some incremental steps towards sustainability, sometimes not (rebound effect).



#### Contacts

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