

Session 8 (Co-hosted with VTT Technical Research Ltd., Finland)

Communicating and responding to uncertainties in scenarios

Wednesday, September 11, 2024



Fifth International Forum on Long-Term Energy Scenarios (LTES) for the Clean Energy Transition
September 9 – 11, 2024

IRENA Innovation and Technology Centre, Bonn, Germany

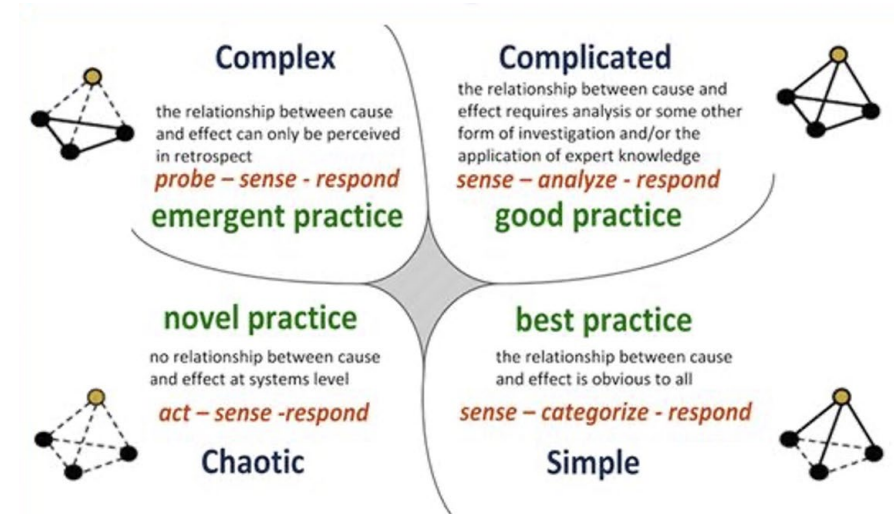
Session 8: Communicating and responding to **uncertainties** in scenarios



To which category energy transition should be placed?



Illustration by Szymon Wiktowicz, VTT



The Cynefin Framework. Snowden, D.J. Boone, M. 2007. "A Leader's Framework for Decision Making". Harvard Business Review, November 2007, pp. 69–76.

Positioning of energy transition

challenge scope and uncertainty

Broad scope

Systems-aware innovation
= new opportunities

Complicated
Challenges

Transformative
Challenges

Operating
in Uncertainty

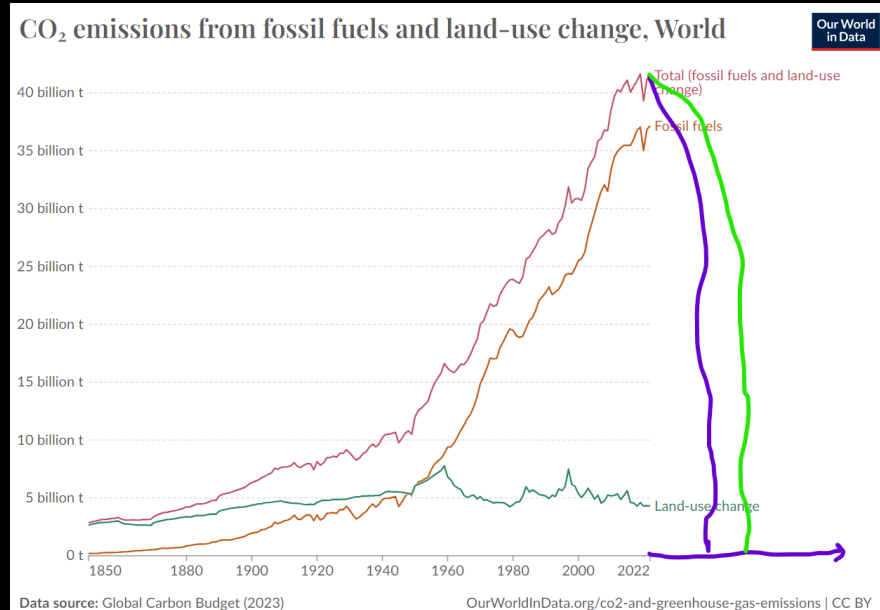
Operating
in certainty

Simple
Challenges

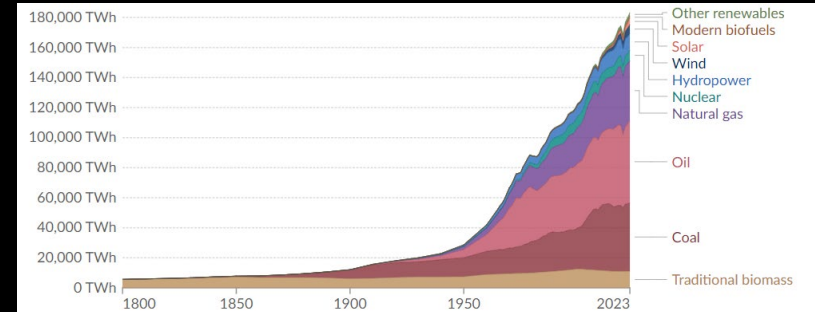
Adaptive
Challenges

Narrow scope

Energy transition beyond 2020: complex problem with high uncertainty

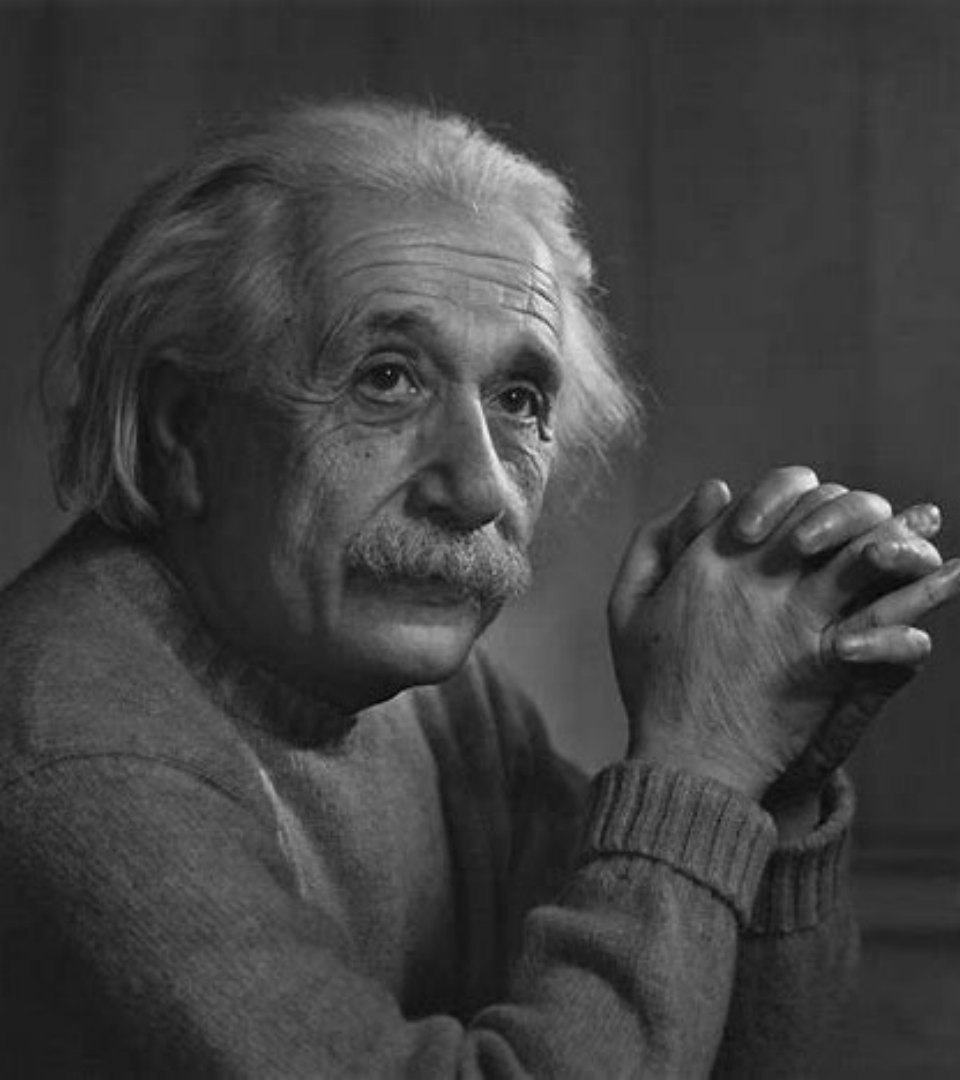


Source: <https://ourworldindata.org/co2-emissions>



<https://ourworldindata.org/grapher/global-energy-substitution>

Net zero CO₂ emissions by 2050 in 1.5 °C
and by 2070 in 2.0 °C mitigation



**We cannot solve
our problems with
the same thinking
we used when we
created them.
-Albert Einstein**

Permanent change in energy behaviour is challenging

Energy crisis in Europe in 2022-2023



Unicef: Photo from Ukraine in 2022

50 years

Energy crisis in Finland in 1973



A-studio 19.12.1973: Saving energy during the oil crisis. Day before Government's new regulations came into force to save energy

Energy **sufficiency**: fair transition considering both technology and behaviour change

Domestic passenger transport in Finland

Energy services

NEEDS

Vital

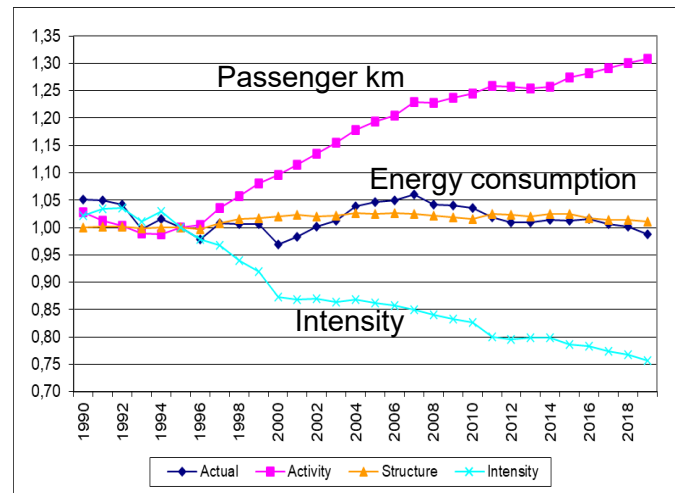
Needed

Accessory

WANTS

Extravagant

Unacceptable



Activity: total passenger-km

Structure: modal passenger-km/total passenger-km

Intensity: modal energy/modal passenger-km

Source: Göran Koreneff, iBEX 2023, VTT

How to communicate and respond to uncertainties in scenarios?

