

Bridging the information divide between climate science and energy modeling

16:20 panel discussion

Climate forecasting for energy workshop

S2S4E/openmod joint event

4 December 2020

Robbie Morrison

Release **03**

3 December 2020

Live status

Slides accompanying the second panel discussion at the Climate forecasting for energy online workshop held 4 December 2020. The workshop was jointly organized by the S2S4E project and the Open Energy Modelling Initiative.

<https://s2s4e.eu/newsroom/climate-forecasting-for-energy-event>
<https://forum.openmod-initiative.org/t/2330>



Copyright (c) 2020 Robbie Morrison (robbie.morrison@posteo.de)

This work is licensed under a Creative Commons Attribution 4.0 International License.

SPDX-License-Identifier: CC-BY-4.0

License-Text: <https://spdx.org/licenses/CC-BY-4.0.html>

Moderation

- ▶ **Robbie Morrison** (framing of discussion)
energy system modeler
Berlin, Germany
- ▶ **Ekaterina Fedotova** (managing questions)
Global Energy Problems Laboratory
Moscow Power Engineering Institute (MPEI), Russia

Panelists

- ▶ **Roberta Boscolo**
Climate and Energy Science Officer
World Meteorological Organization (WMO), Switzerland
- ▶ **Sofia Simões**
Head of Unit, Resource Economics Unit
National Laboratory of Energy and Geology (LNEG), Portugal
- ▶ **Ralph Evins**
Director, Energy in Cities lab
University of Victoria (UVic), Canada
- ▶ **Alberto Troccoli**
Founder and Managing Director
World Energy and Meteorology Council (WEMC), United Kingdom

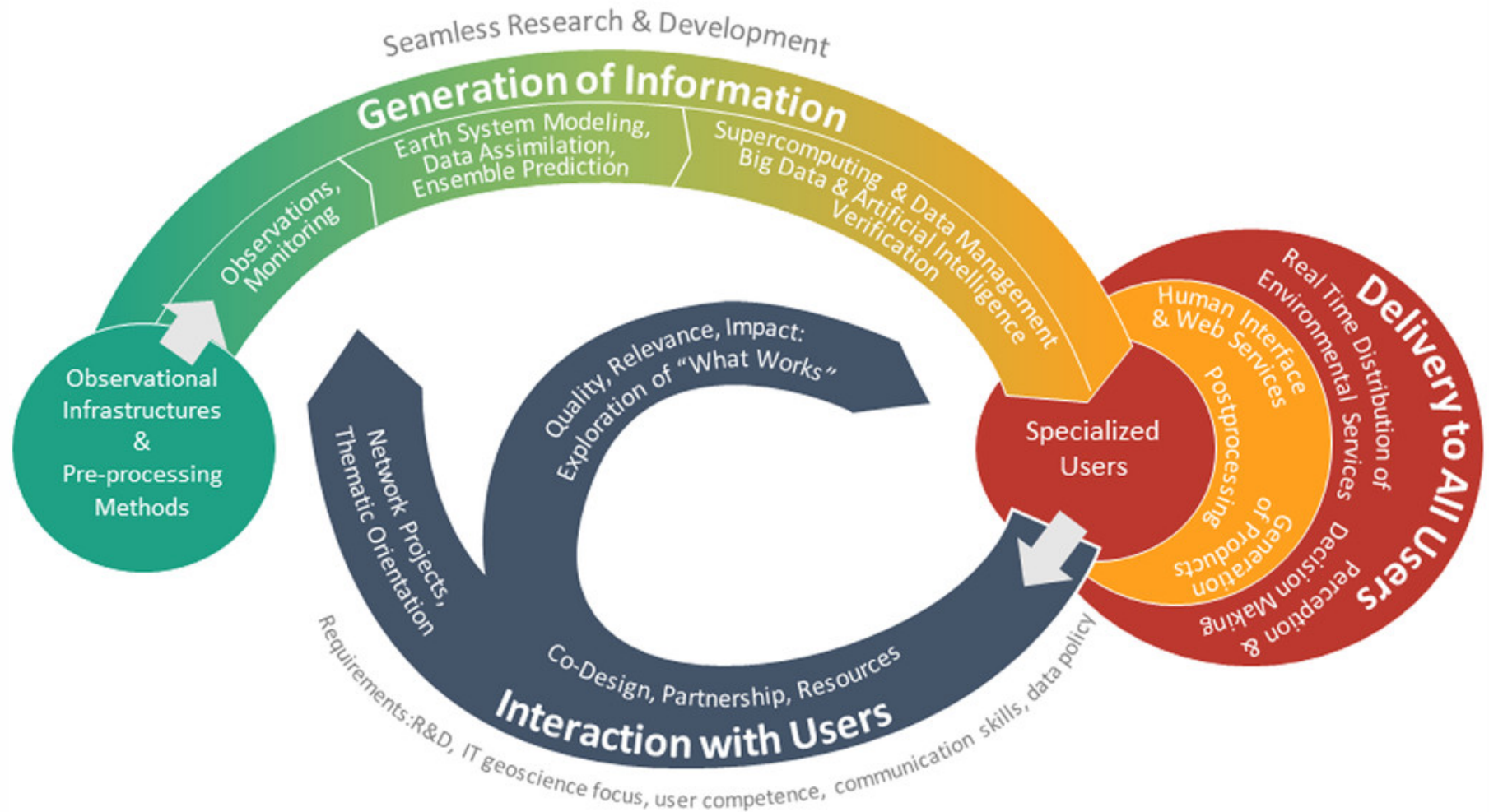
Information bridges

- ▶ **data bridges**
piping data from one model type to the next
- ▶ **educational bridges**
helping communities connect, for example
 - ▶ power system modelers to understand climate risk
 - ▶ climate scientists to understand system modeling requirements
- ▶ **research collaborations**
establishing better and deeper partnerships
- ▶ **joint end-user support**
providing results and context to industry and for public policy
- ▶ **distributed data architectures**
supporting reproducible workflows and complex data integration
 - ▶ DBpedia Databus project

The Value Cycle (network) Approach

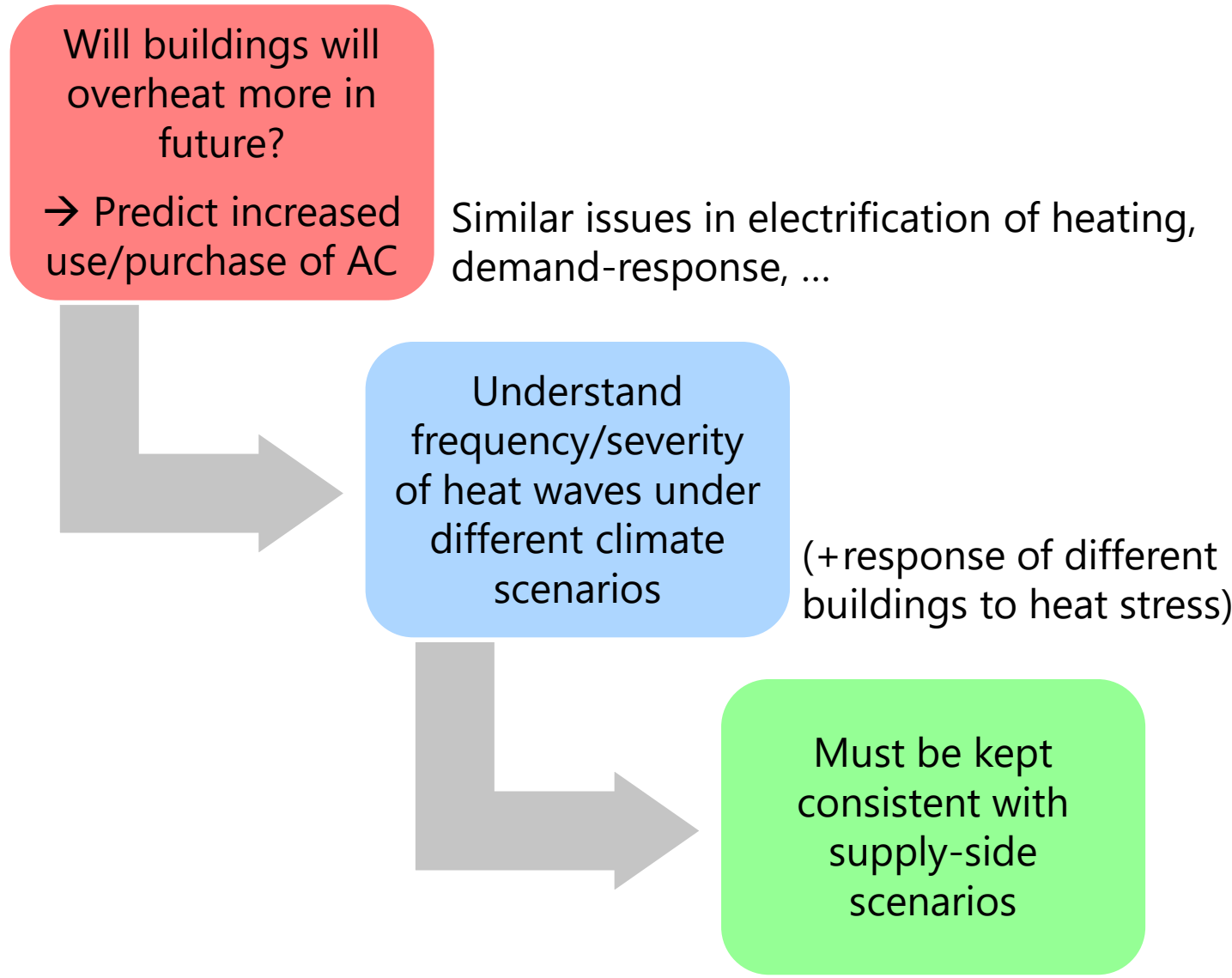


SCIENCE FOR SERVICES JOURNEY





How to bridge demand-supply *and* energy-climate models



Likely technically impractical to directly link climate models to supply + demand models...

Different ways of abstracting / reconstituting information from climate models?

Bridge physics-based and machine-learning models?

