Interdisciplinary Energy System Research National Research Data Infrastructure for Interdisciplinary Energy System Research Astrid Nieße et al.



> Motivation

IV

V

> Stakeholders

What are the right partners for my research idea?

What would be the appropriate energy system scenario and experimental setup?

How can we use digitalization benefits to integrate our models, labs, and data?

Research Community

- Interdisciplinary
- Need for reuse of research data and software

Society and Policy

- Possible data provider
- Interested in scientific results

How can we discuss our results with the community, public, and industry?

What are our blind spots and research gaps for follow-up activities?

> Services I

Competence to help to navigate the interdisciplinary research field

Transparency to



Industry

- Possible data provider with need for anonymization
- Interested in scientific results
- Interested in data and models

Services II

Best Practices to get information about successful conduct of research including research data

involve more
stakeholders in
all research stages

Simulation to couple existing simulations and, therefore, reuse software artefacts Simulation suita software a

management

Registry to find suitable FAIR data and software artefacts for reuse

> Goals

Support the transformation of digitalized energy systems using FAIR data and software

- Establish common research community services and motivate their use in the community
- 5. Simplify identification, integration, and coordination of simulation-based models
- Improve traceability, reproducibility, and transparency
- 3. Enable and motivate the involvement of society
- Promote better collaboration and knowledge transfer between scientific research institutes and business partners
- 6. Integrate the provided services within the wider NFDI ecosystem



