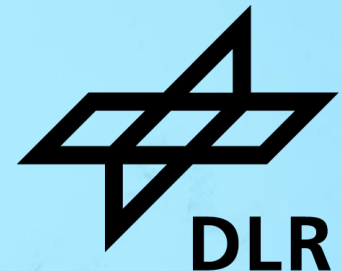# COMMUNITY BUILDING

Modelling electricity markets using the framework FAME and the model AMIRIS
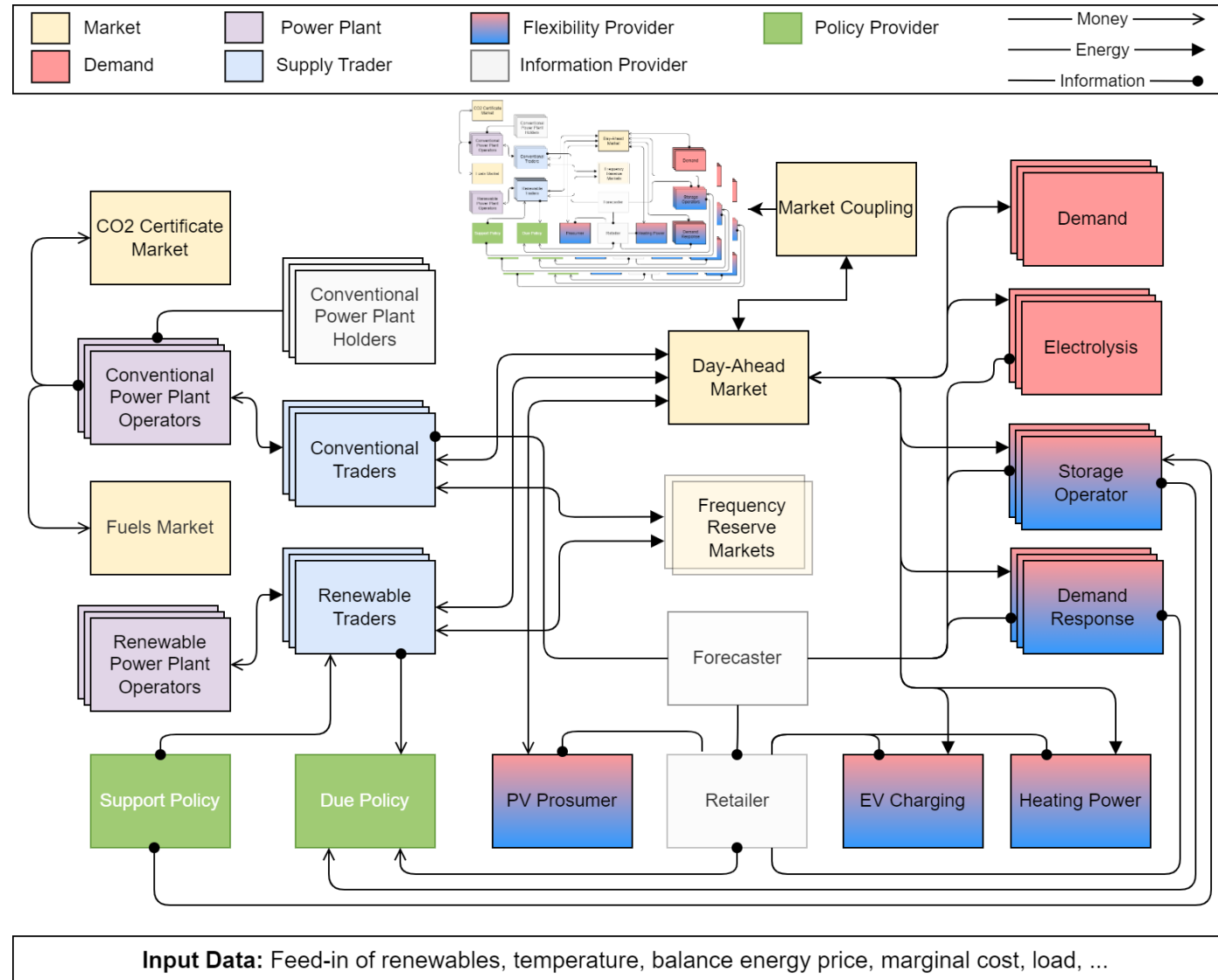
Felix Nitsch[1] on behalf of the AMIRIS team

WAW Software Engineering X, Berlin
14.09.2023

[1] German Aerospace Center (DLR)
Institute of Networked Energy Systems
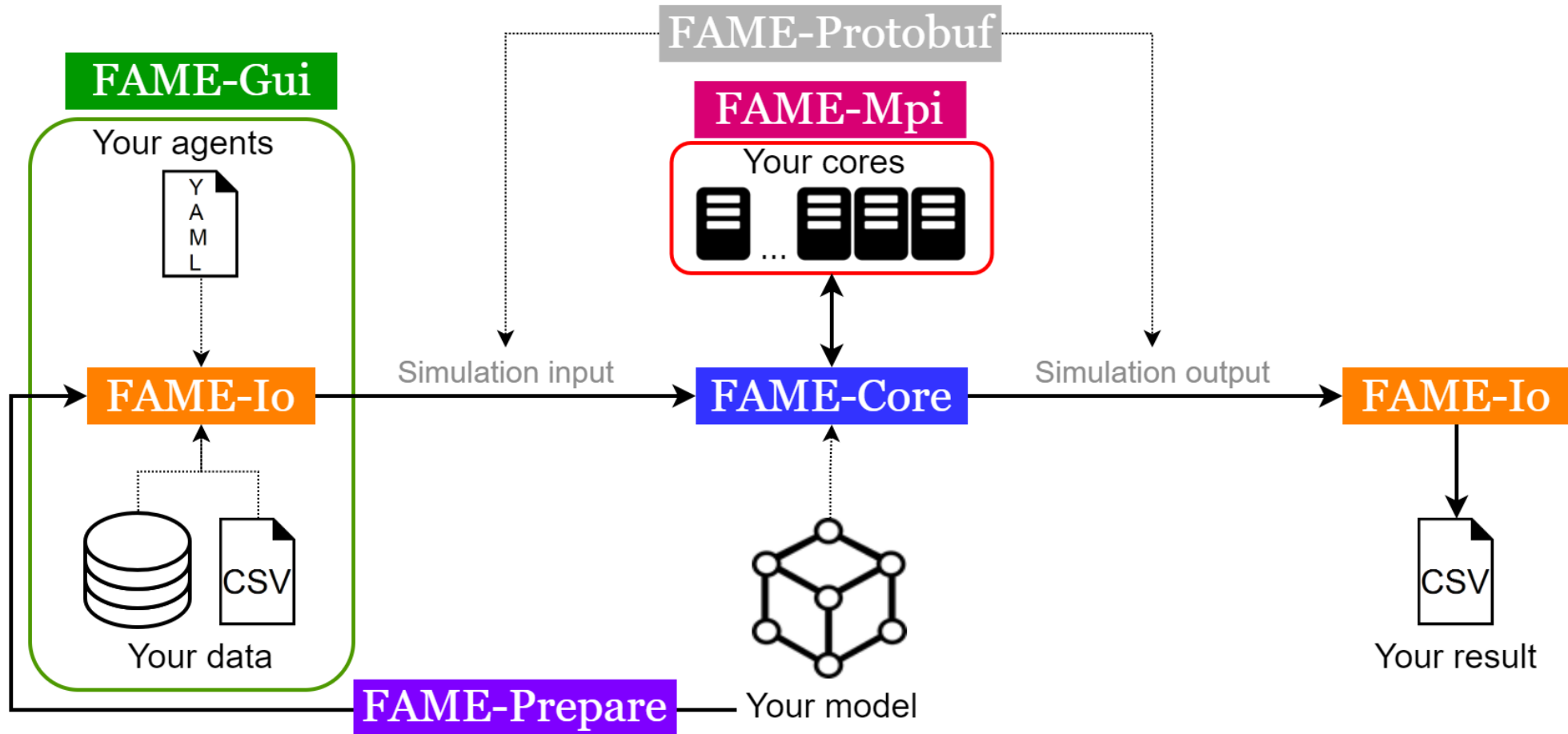Curiestr. 4, 70563 Stuttgart, Germany
felix.nitsch@dlr.de

DLR

AMIRIS

Agent-based **M**arket model for the **I**nvestigation of **R**enewable and **I**ntegrated energy **S**ystems

FAME
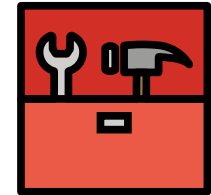## open Framework for distributed Agent-based Models of Energy systems

Timeline
From early versions to open source

2010 — early version of AMIRIS

2014 — 1st ABM workshop Delft / begin framework development

2016 — (star)

2020 — porting AMIRIS to FAME / 2nd ABM workshop Berlin

2021 — preparation open source publication

2022 — OS release AMIRIS and FAME / online release workshop

2023 — hands-on workshop Berlin / 3rd ABM workshop Stuttgart

openmod workshop Laxenburg
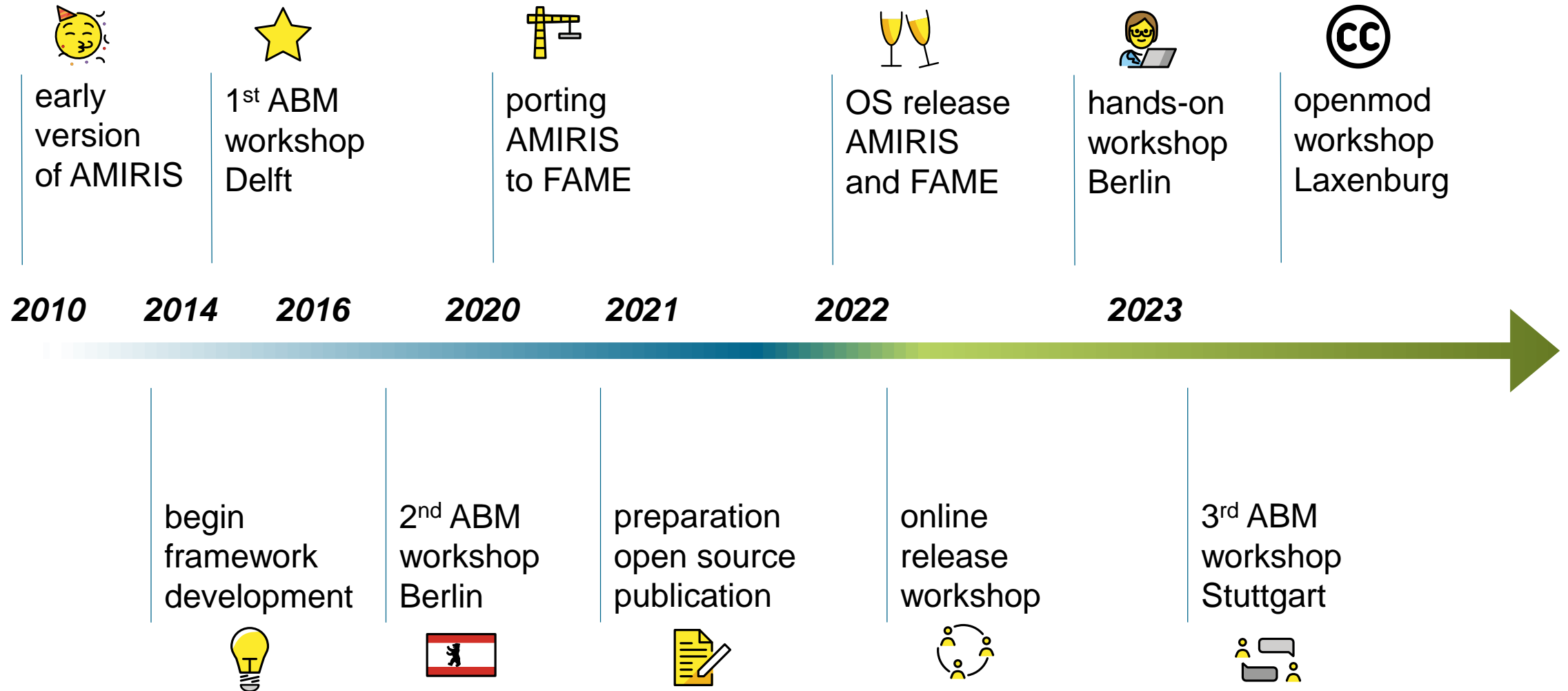
Findable	**Accessible**	**Interoperable**	**(Re-)usable**
• Unique identifier • Wikipedia • COMSES • HECI • OEP • openmod	• Git • Maven • PyPI	• API • Workflow tools • CSV • YAML	• Apache 2.0 • REUSE • Wiki • Javadoc • Win/Mac/Linux • Scalable (H)PC

Icons by OpenMoji, CC BY-SA 4.0

Barker et al. (2022). 10.1038/s41597-022-01710-x

Community Building
Workshops and Tutorials

- Present our work, connect to community

- [Tutorials](#) on installation, model execution, and variation

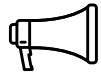- Implemented Python [Wrapper](#) & reworked all [documentation](#)

Nitsch F., Institute of Networked Energy Systems, 09/2023
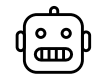
Online Community Building
openmod

Grass root initiative of modelers from various universities/institutes

[Promoting](#) use of [OS software](#) and [open data](#) in [energy system](#) [modelling](#)

[User forum](#) with search tags [amiris](#) & [fame](#)

We use openmod to:

- Announce releases
- Provide help by Q&A
- Offer open support to external users
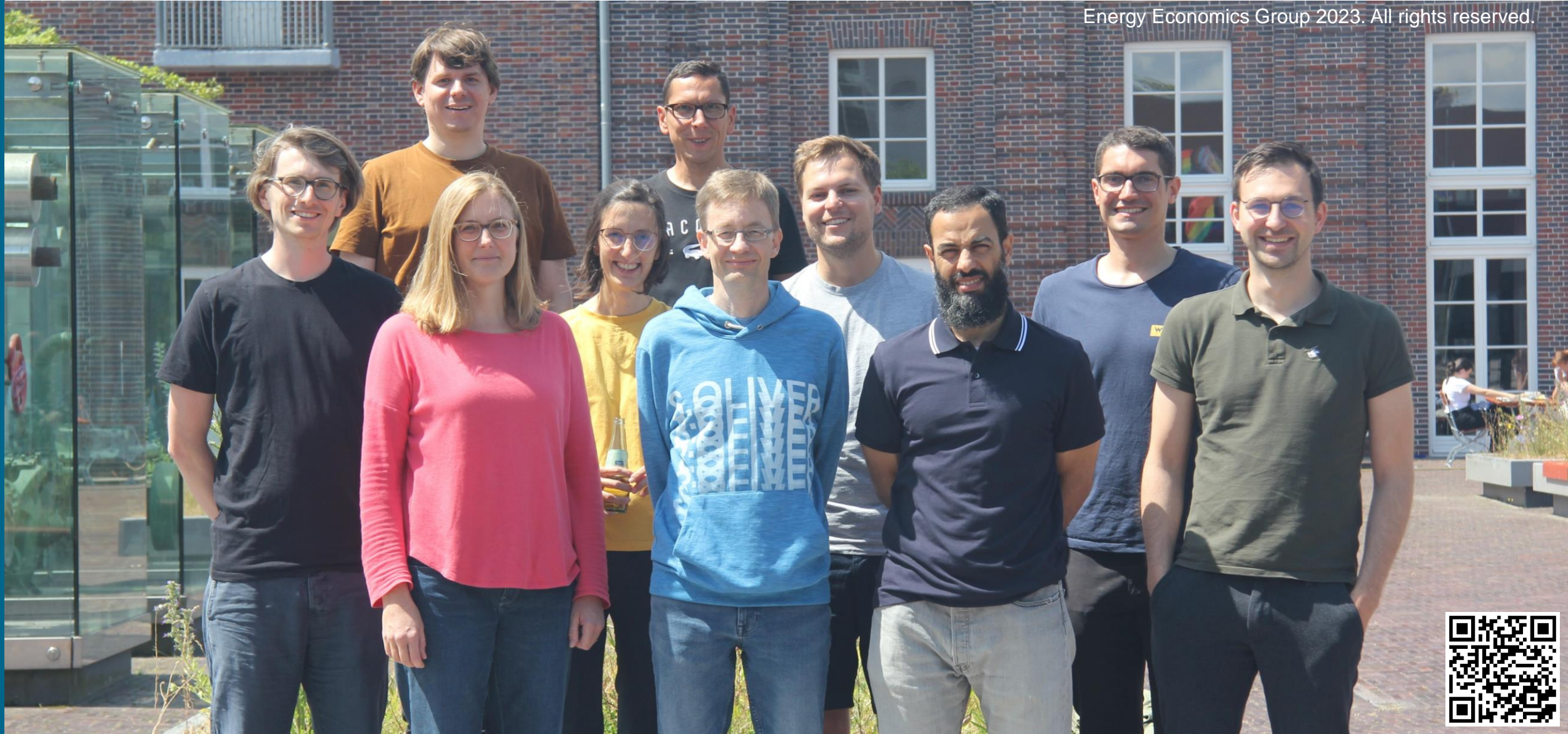- Increase visibility among our domain

Thank you for your attention!

Imprint

Title: Community Building: Modelling electricity markets using the framework FAME and the model AMIRIS

Date: 14.09.2023

Author: Felix Nitsch

Institute: Institute of Networked Energy Systems

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