

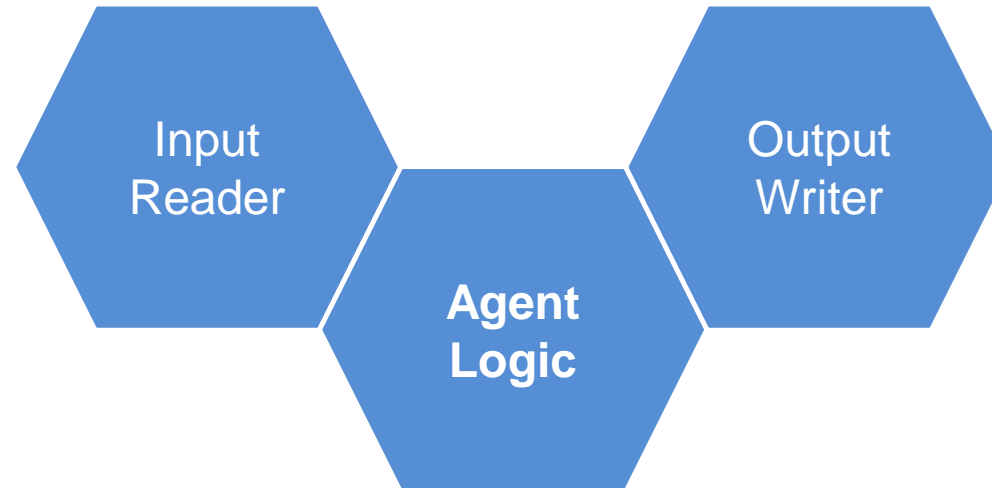
# FAME

open Framework for Agent-based Modelling of Energy systems

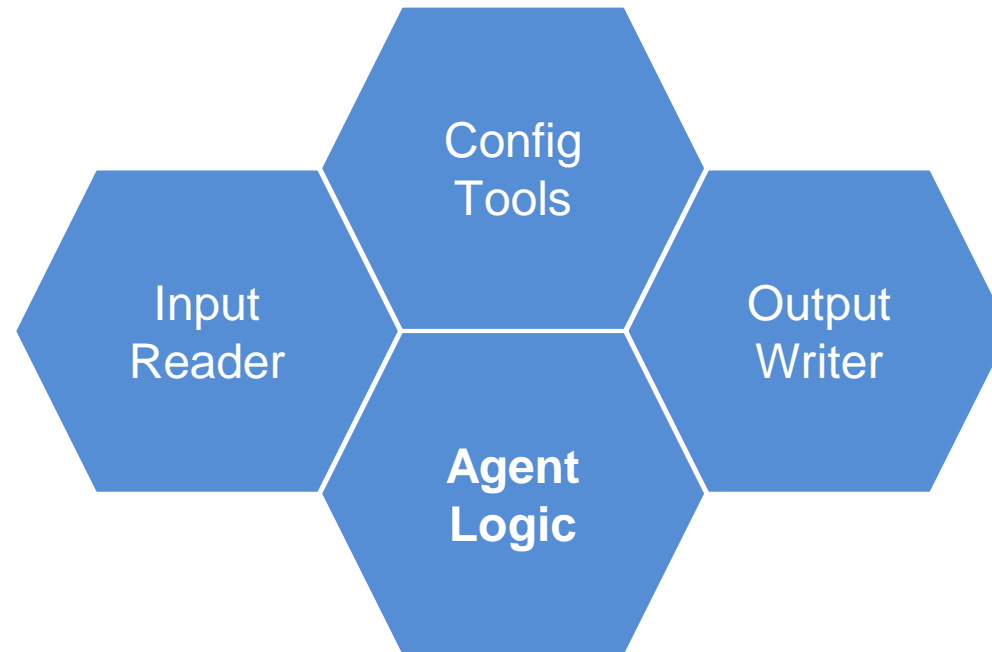
# Writing a simulation model...



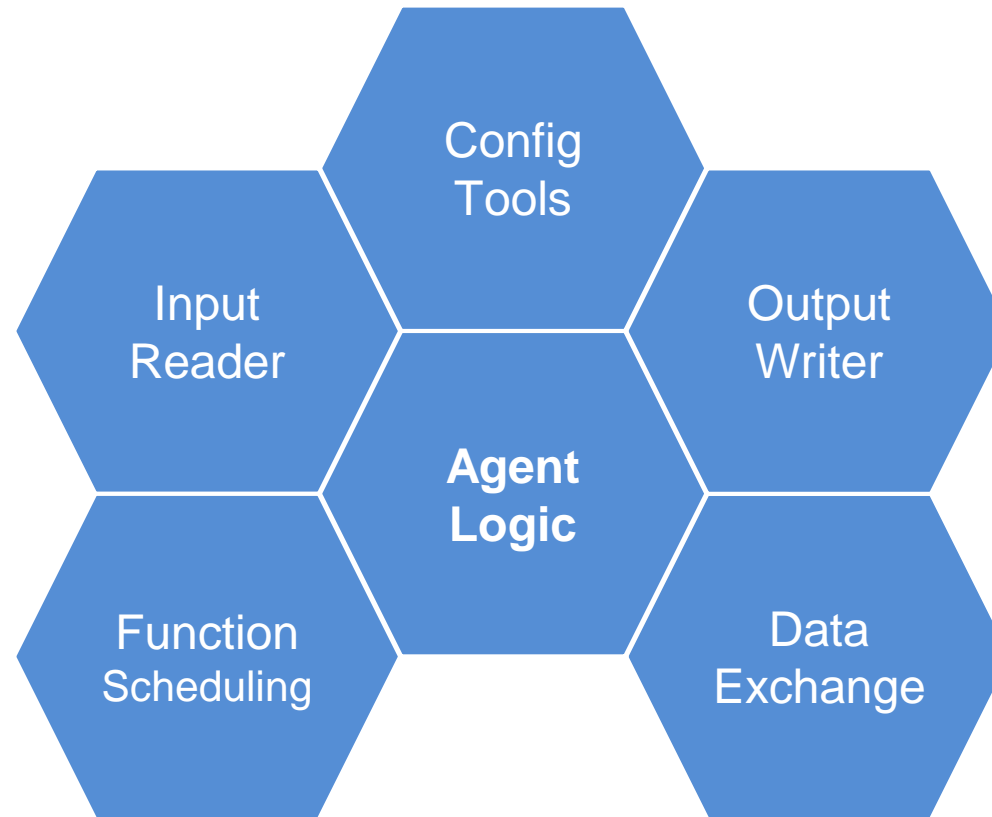
# Writing a simulation model...



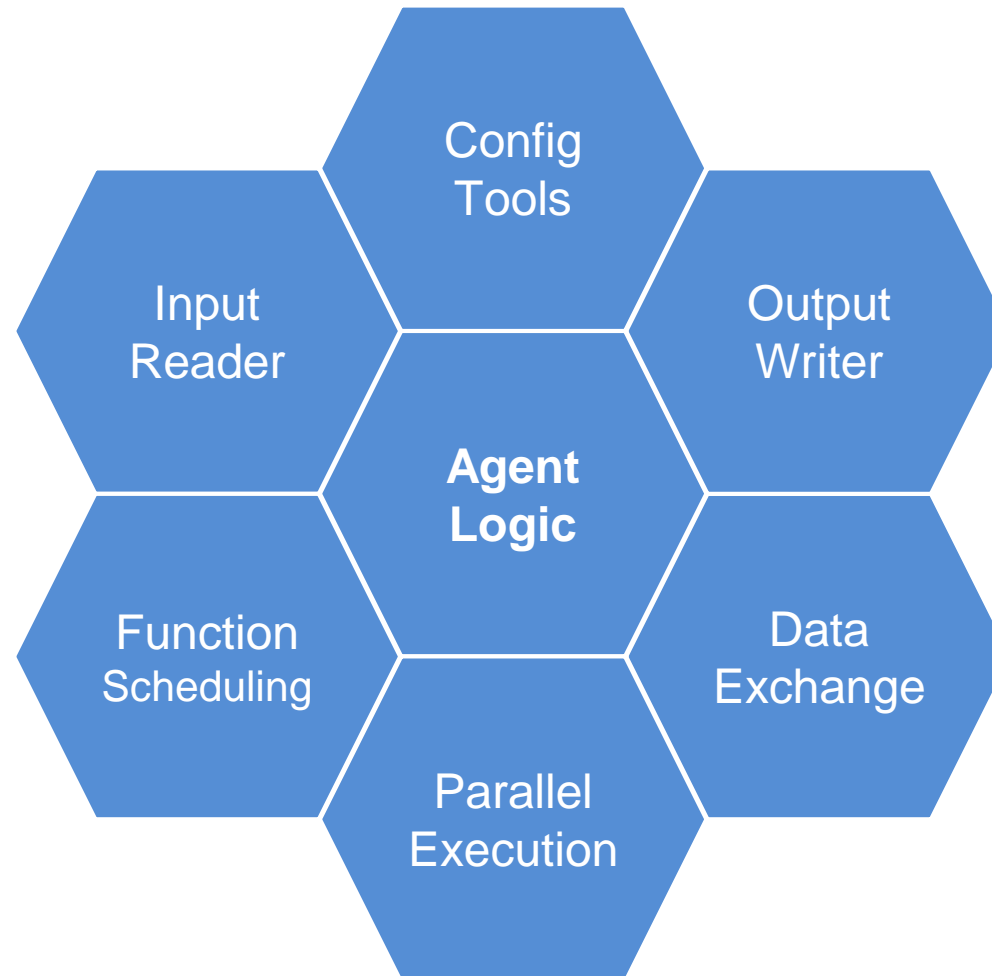
# Writing a simulation model...



# Writing a simulation model...

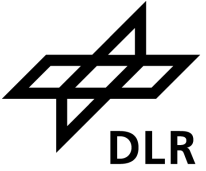


# Writing a simulation model...

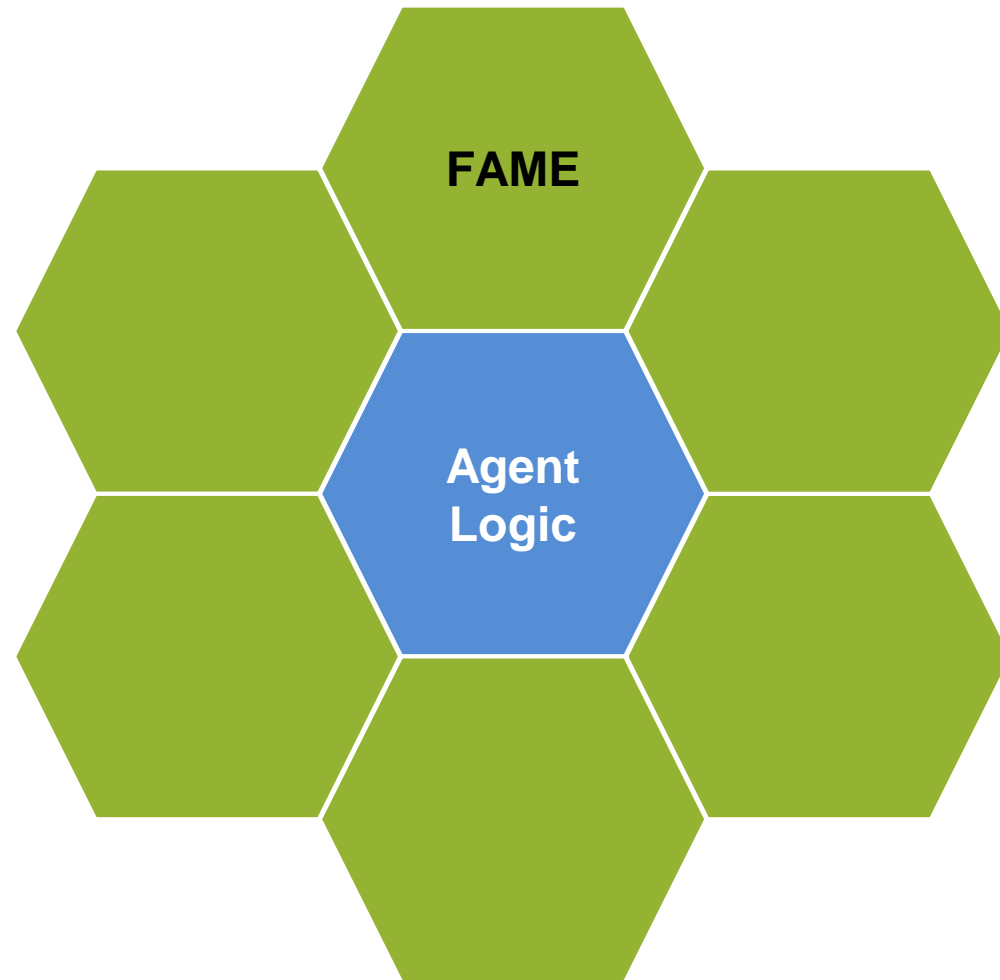


# FAME

open Framework for distributed Agent-based Modelling of Energy systems



*Reduce your coding overhead!*



# FAME

In a Nutshell



## FAME organises

- Data exchange
- Execution order
- Input & Outputs
- Parallelisation

→ **Write less code**

## FAME is open

- Apache 2.0

→ **No hidden costs**

## FAME offers flexible

- Input
- Output
- Agent interactions

→ **Configure, not code!**

## FAME helps @ model

- Coding
- Configuration
- Execution

→ **Full lifecycle support**

## FAME is portable

- Windows / Linux / Mac
- Laptop / Server / HPC

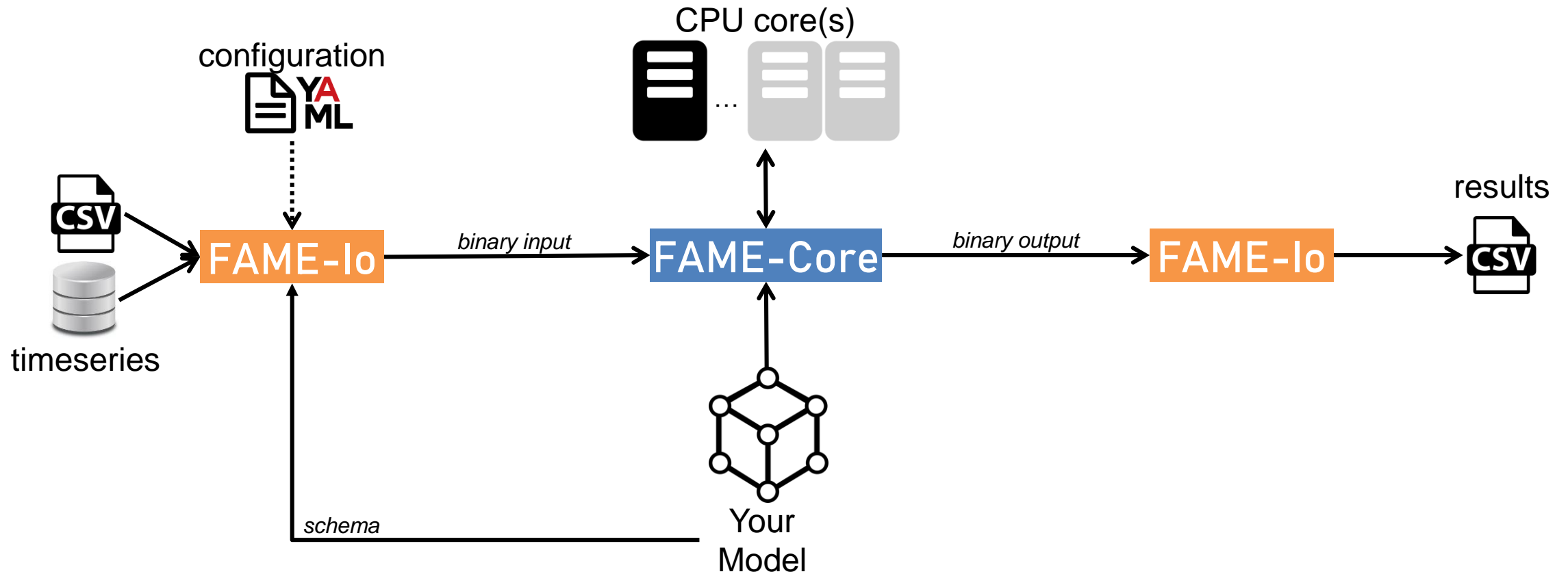
→ **Scale to your needs**



<https://gitlab.com/fame-framework>

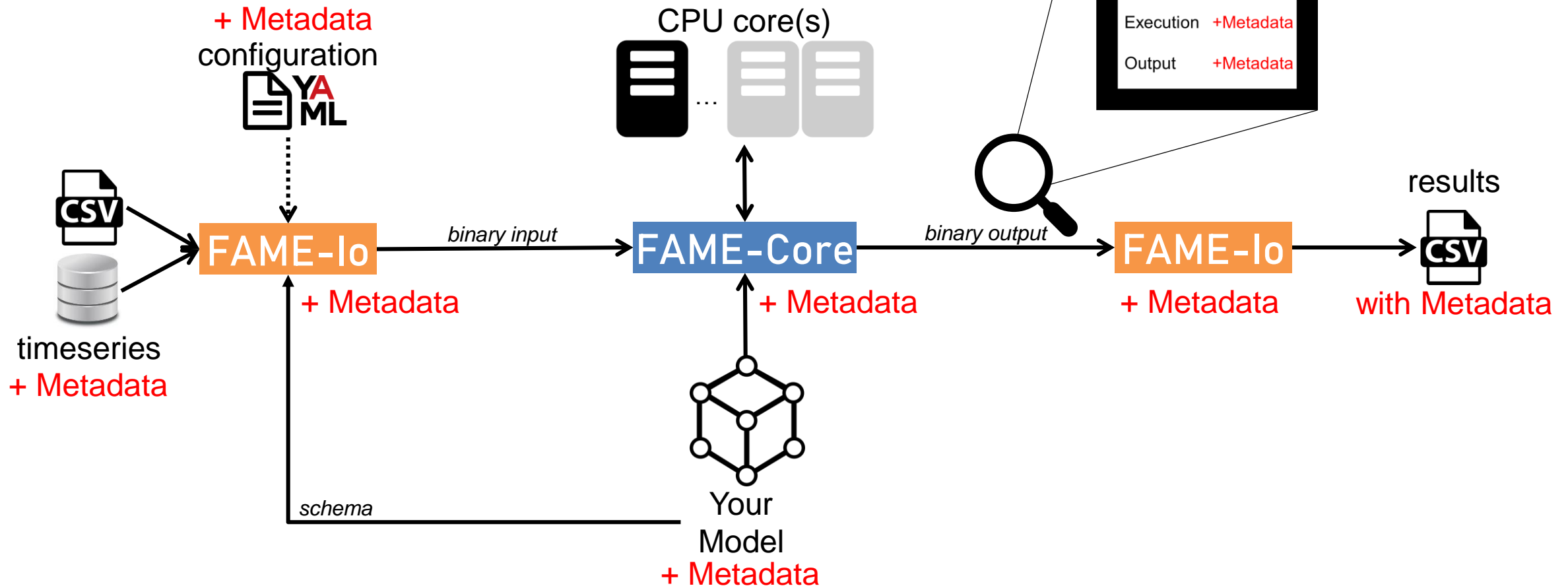


# FAME Execution Workflow



# Add Metadata

Track, Enrich, Describe, Link







FAME-Core: <https://joss.theoj.org/papers/10.21105/joss.05087>  
FAME-Io: <https://joss.theoj.org/papers/10.21105/joss.04958>

# FAME Application

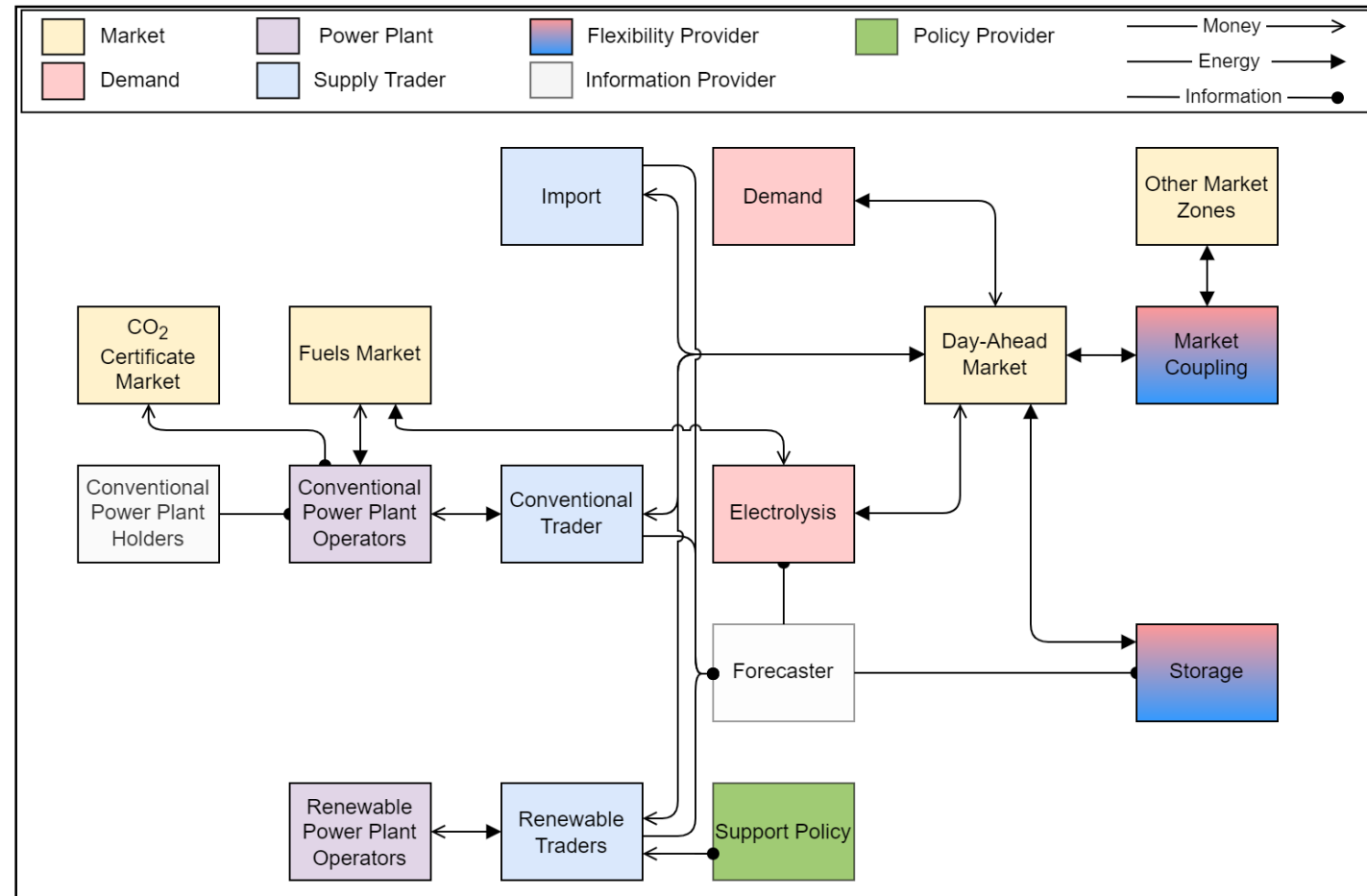
Open Electricity Market Model AMIRIS



-  Simulate trading and operation of power generation plants and flexibility options
-  Model business-oriented behaviour under uncertainty
-  Temporal resolution:  $\leq$  hourly
-  Spatial resolution: market zone(s)



<https://dlr-ve.gitlab.io/esy/amiris/home/>



<https://joss.theoj.org/papers/10.21105/joss.05041>

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Federal Ministry for Economic Affairs and Climate Action



Federal Ministry of Education and Research



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# Imprint



Topic: FAME – an open Framework for Agent-based Modelling of Energy systems

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