KMU Forschung Austria
Austrian Institute for SME Research

Kerlen
EVALUATION

AUSTRIAN INSTITUTE OF TECHNOLOGY
TOMORROW TODAY

USING EVALUATION FINDINGS TO SUPPORT THE ENERGY TRANSITION – THE 7TH ENERGY RESEARCH PROGRAMME AS A LEARNING PROGRAMME

Energy Evaluation Conference 2025

26.09.2025

Michael Dinges, Christiane Kerlen and Kathleen Toepel

AGENDA

Introduction

The Evaluation`s Learning Cycle

Conducting the Evaluation (with Surprises!)

Conclusions

INTRODUCTION

The 7th Energy Research Programme and its Evaluation

THE 7TH ENERGY RESEARCH PROGRAMME

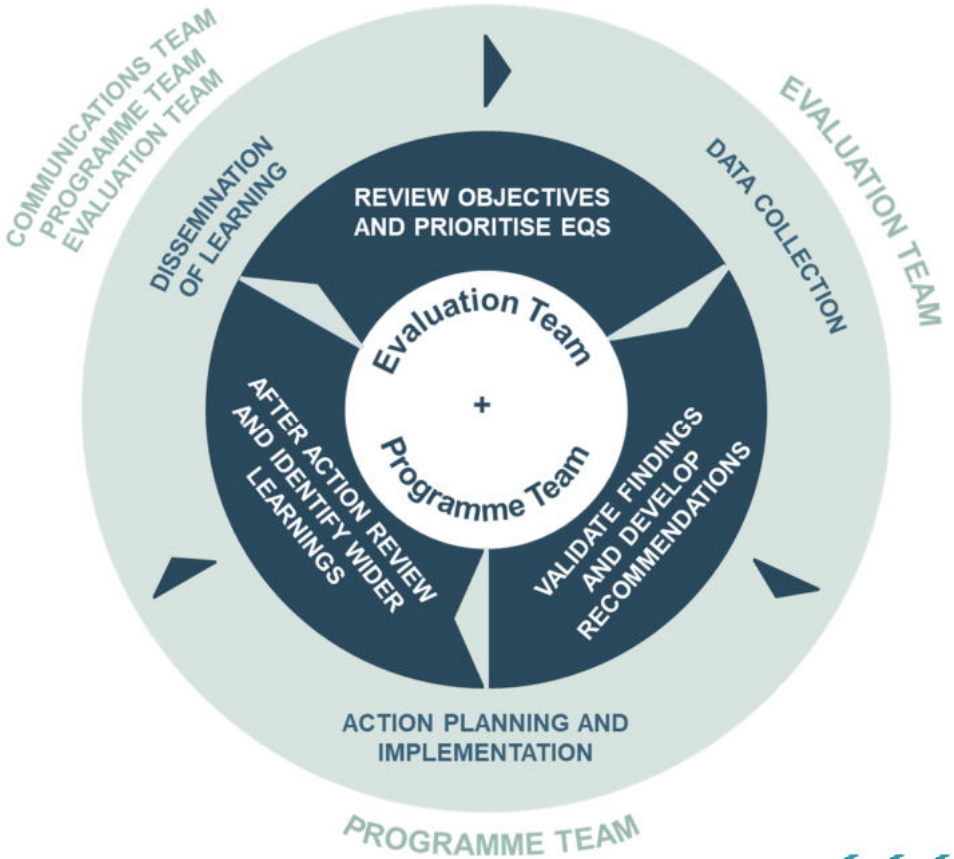
- The 7th Energy Research Programme (ERP) ‘Innovations for the Energy Transition’ is pursuing a strategic approach for energy research, focussing on the transfer of technology and innovation.
- The Federal Ministry for Economic Affairs and Climate Action (now: Energy) funded
  - Collaborative FTI Projects (TRL 3-7)
  - Living Labs (TRL 7-9) and Micro Projects
  - Energy Research Networks and Research Communication
- Open calls offer continuous application possibilities

2018 – 2023: 6,500 projects with funding of € 3,318 bn.

THE EVALUATION APPROACH

- The evaluation of the Energy Research Programme started in 2021 and is a **five-year accompanying evaluation** on behalf of the German Federal Ministry for Economic Affairs and Energy.
- The **evaluation is theory-based** combining a programme theory approach with multi-level perspective innovation system thinking and the concept of transformative outcomes.
- It uses a **mixed-methods approach** to develop ongoing analyses, reflections and recommendations as a basis for steering and continuous improvement of the programme ("programme learning"), while also contributing to an assessment of its effectiveness and impact of the programme.

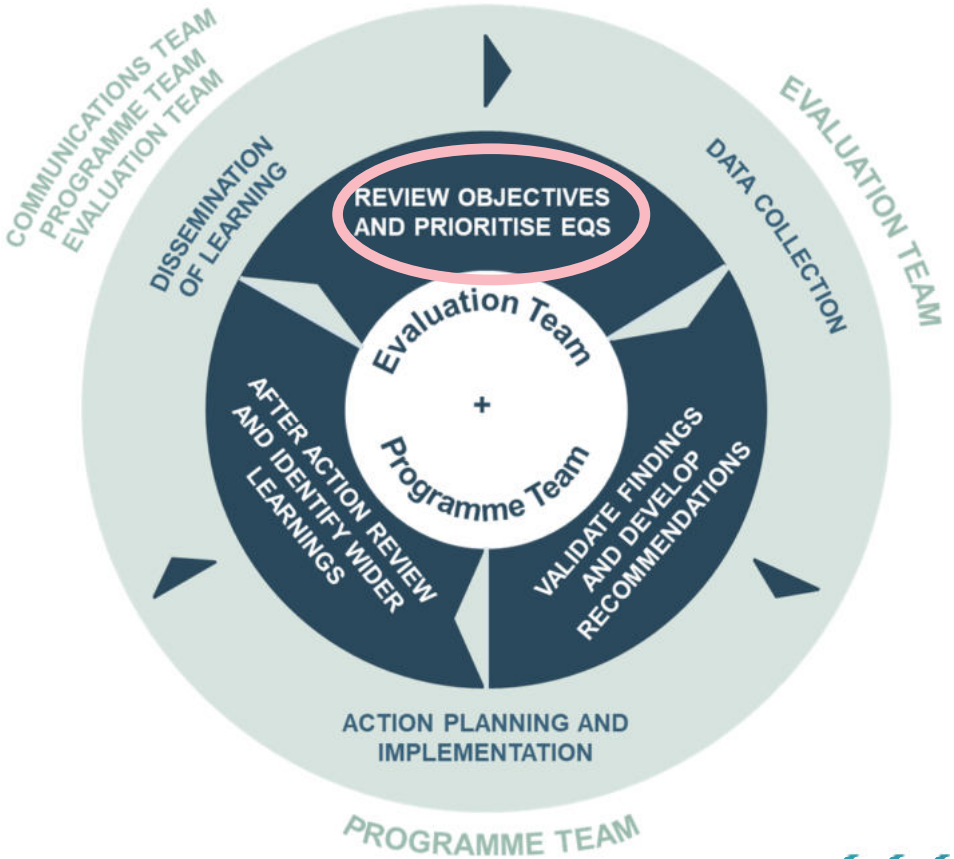
THE EVALUATION´S LEARNING CYCLE



A cycle of events and activities were built into the evaluation process to maximise the opportunities for learning

3 fixed evaluation rounds: data collection and analysis incl. flexible in-depth topic investigations

Regular meetings with clients and expert workshops

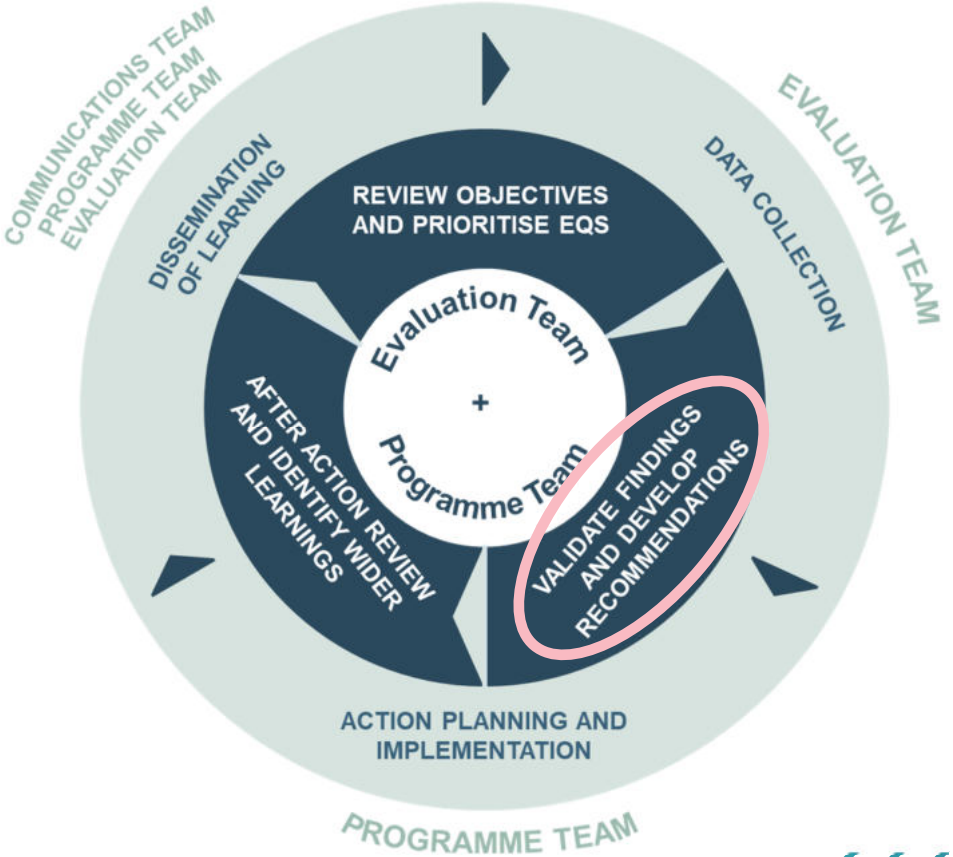


Review objectives and prioritise Evaluation Questions

Review for any changes in the target system and update

Identification of evaluation questions that are of particular interest

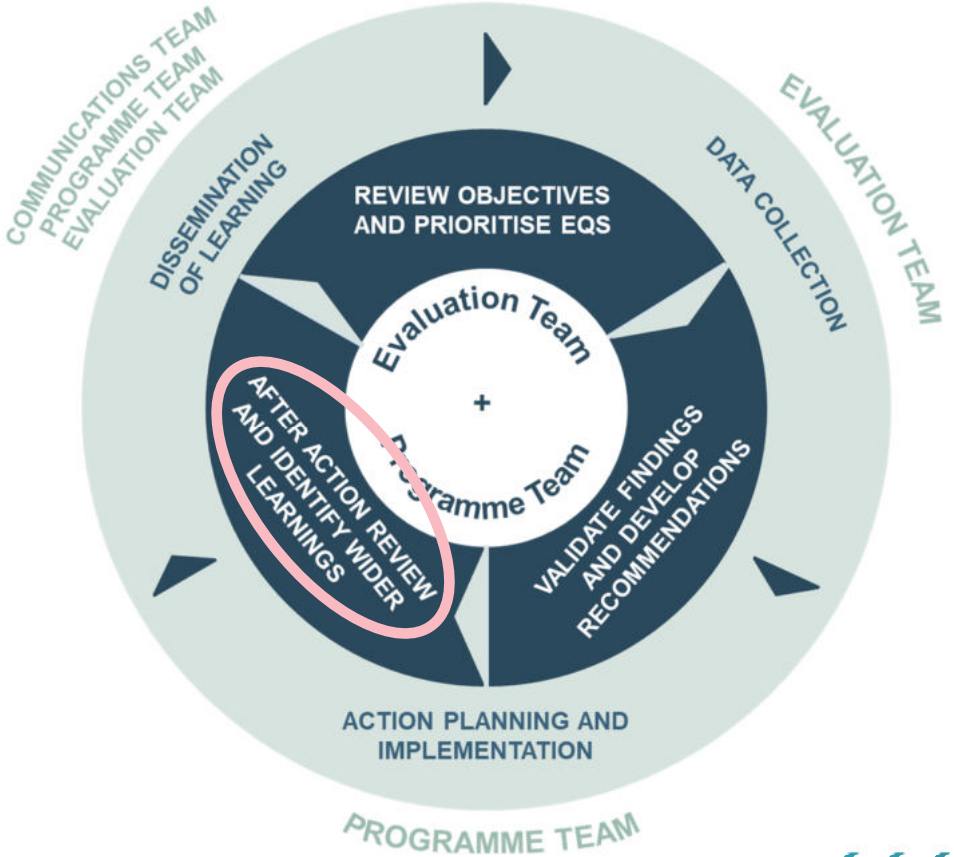
Choice of in-depth topics and agreed concept



Validate Findings and Develop Recommendations

Joint reflection meeting with Ministry and Funding Agency

Co-development of recommendations (timetable, responsibilities)



After Action Review and Identify Wider Learnings

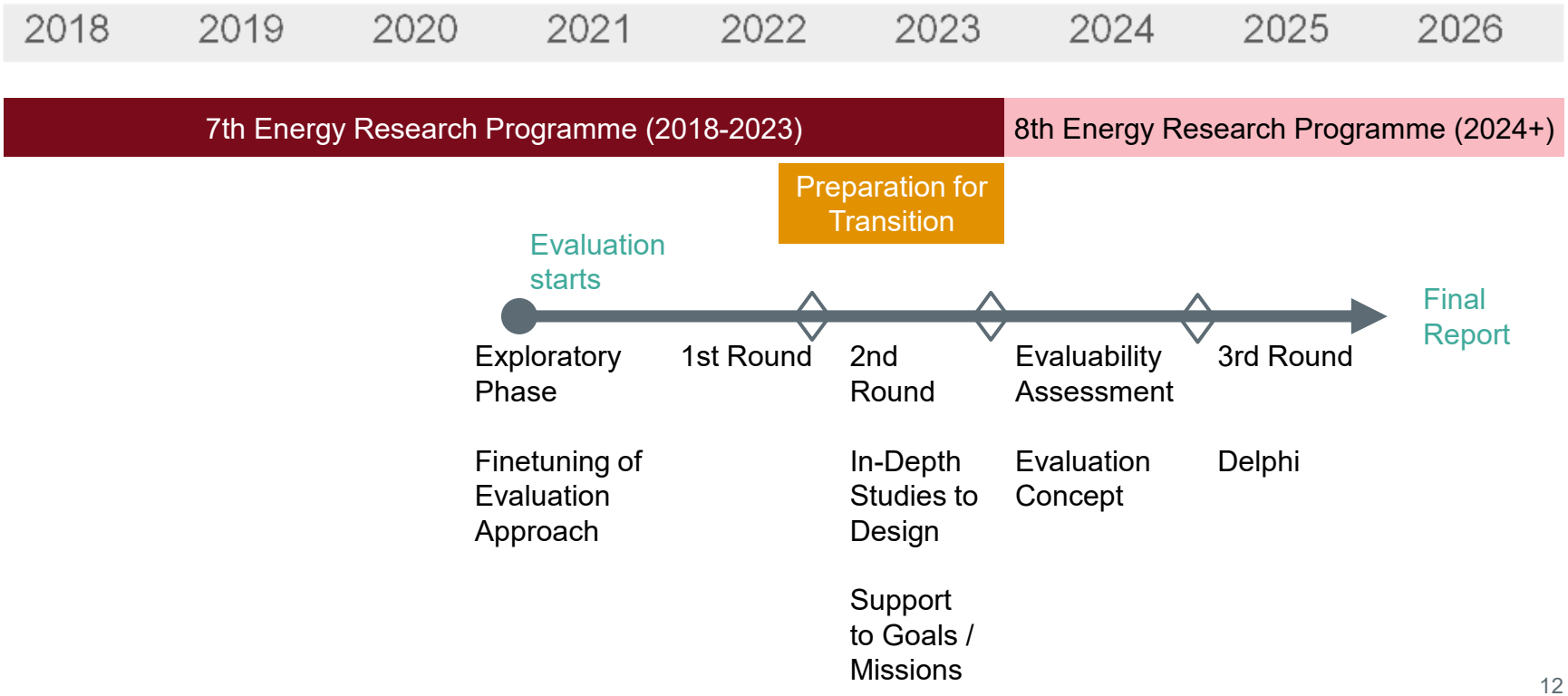
Feedback on the completed evaluation round

Adaptation of the evaluation concept if necessary

Identification of key findings for dissemination

CONDUCTING THE EVALUATION

TIMELINE PROGRAMMES AND EVALUATION



RESULTS: CHANGES TO THE LEARNING CYCLE

- **Review of the objectives** not longer necessary
- **Prioritizing evaluation questions**: helped to focus data collection and analyses for the evaluation rounds, additional in-depth studies for preparation
- **Validating the results and deriving recommendations for action**: presentations after rounds, but no clear action plans – everything directed towards ERP 8
- **Conclusion of the evaluation round:** the planned reflection did not take place
- **Identification of wider learnings**: shared learnings on a wide range of conferences

CONCLUSIONS

CONCLUSIONS

- The **learning cycle** with the three learning occasions proved to be **helpful**, even if it could not be implemented consistently.
- The in-depth studies with short-term adjustment of the topics to the interests of the client in a specific situation were an important element for a **flexible response of the evaluation to changing external conditions**.
- **Close and regular communication** between the evaluation team and the client is useful for recognizing and responding to changing interests and needs in good time and helps to build trust.
- Evaluation in a challenging environment requires both **consistency and flexibility within the evaluation team**.
- Not all challenges can be foreseen - the evaluation setting must also be able to react to them (e.g. optional services).

Recommendation: closely involve stakeholders, contain flexible elements to give adaptability and create room for reflection, sense-making and learning.

Further Reading

Dinges, M. et al. (2022): Theories of change for evaluating transformation-oriented R&I programmes: the case of the 7th Energy Research Programme in Germany. Fteval Journal for Research and Technology Policy Evaluation, April. Vol. 53, pp. 57-68. DOI: 10.22163/fteval.2022.542

Dinges, M. et al. (2025): The Contribution of R&I programmes to Transition: Evidence on Transformative Outcomes in the areas of the Green Transition and the Energy Transition. Fteval Journal for Research and Technology Policy Evaluation, June, Vol. 57, pp. 175-192 DOI: 10.22163/fteval.2025.701

Contact: Kathleen Toepel
kathleen.toepel@kerlen-evaluation.de
Christiane Kerlen
christiane.kerlen@kerlen-evaluation.de

BACKUP

Objectives of the 7th Energy Research Programme

OBJECTIVES OF THE 7TH ENERGY RESEARCH PROGRAMME