

# Clean Circles

## Iron as energy carrier in a carbon-free circular energy economy

### End-of-Project Meeting

02.04.2025 - Karlsruhe

Clean  Circles

Wednesday, 02.04.2025 13:00 – 18:30

KIT Senatssaal, Geb. 11.30, Engelbert-Arnold-Str. 2, 76131 Karlsruhe

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13:00 – 14:00

**Get-together with Lunch**

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14:00 – 15:40

**Clean Circles**

Welcome and Introduction

*Olaf Deutschmann, Andreas Dreizler*

**Spotlights**

**Enabling a Circular Energy System?**

Comparing Metals and Hydrogen Derivatives

*Julia Schuler*

Techno-Economic Insights into Iron-Based Energy Cycles: A Power-to-Power and Sub-Process Analysis

*Jannik Neumann*

**Energy Release – Production of High-Temperature Heat**

Operando Synchrotron Measurements of a Laminar Flame

*Dmitry Doronkin*

Modeling Iron-Air Oxidation – From the Particle to the Flame

*Arne Scholtissek*

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15:40 – 16:00

**Break**

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16:00 – 17:20

**The Energy Transition Requires Governance**

Multi-criterial Selection of Partner Countries

**Spotlights**

*Kai Schulze*

Linking innovation and global political cooperation - the case of clean technologies

*Ingrid Ott*

**Renewable Energy Storage – Recycling and Reduction**

Unraveling reduction behavior and cyclization effects

*Carola Kuhn, Max Deutschmann*

Electrochemical Slurry Reactor for Continuous Iron Oxide Reduction

*John Linkhorst*

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17:20 – 17:30

**The Future of Metal Energy Carriers**

Outlook and Closing

*Christian Hasse*

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17:30 – 18:30

**Farewell and Dinner**