# Synthesizing the current knowledge on the renewables pull – A systematic literature review

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The Politics and Economics of Sustainable Structural Transformation

# Agenda

- **Definition:** What is the ‘renewables pull’?
- **Method:** Our systematic literature review
- **Mapping** of the identified literature
- **Key findings** from the identified literature
- **What’s next?** – Future research needs

# **Definition:** What is the ‘renewables pull’?

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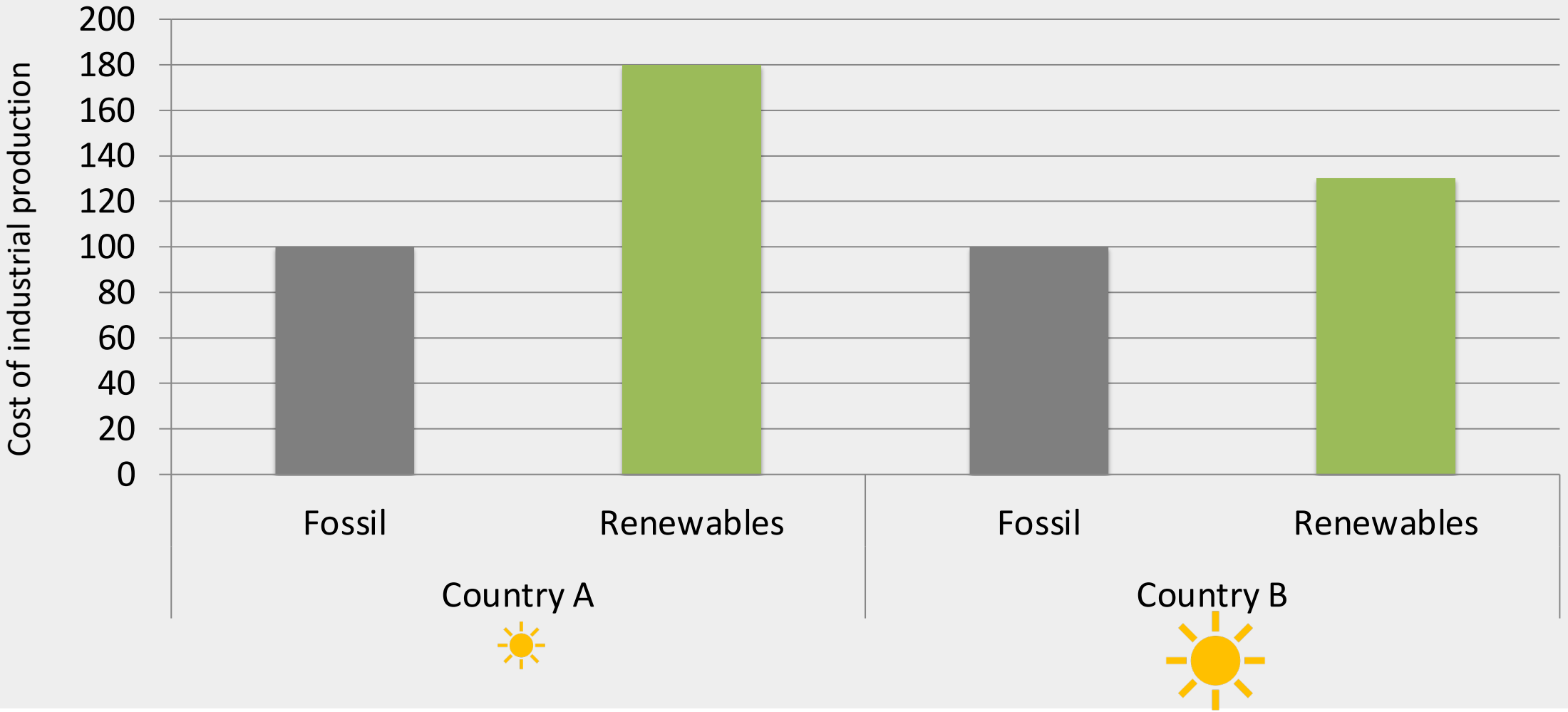

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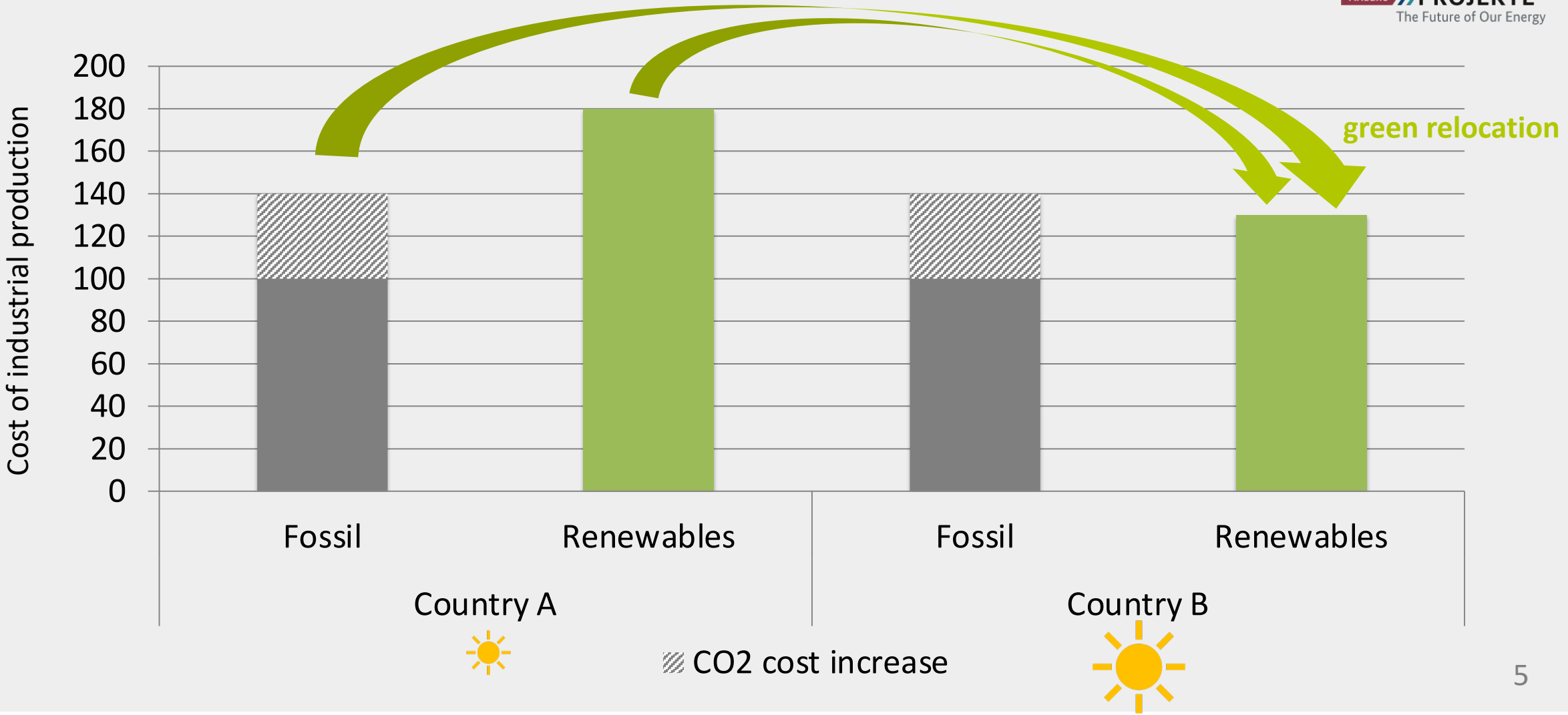

# **Method:** Our systematic literature review

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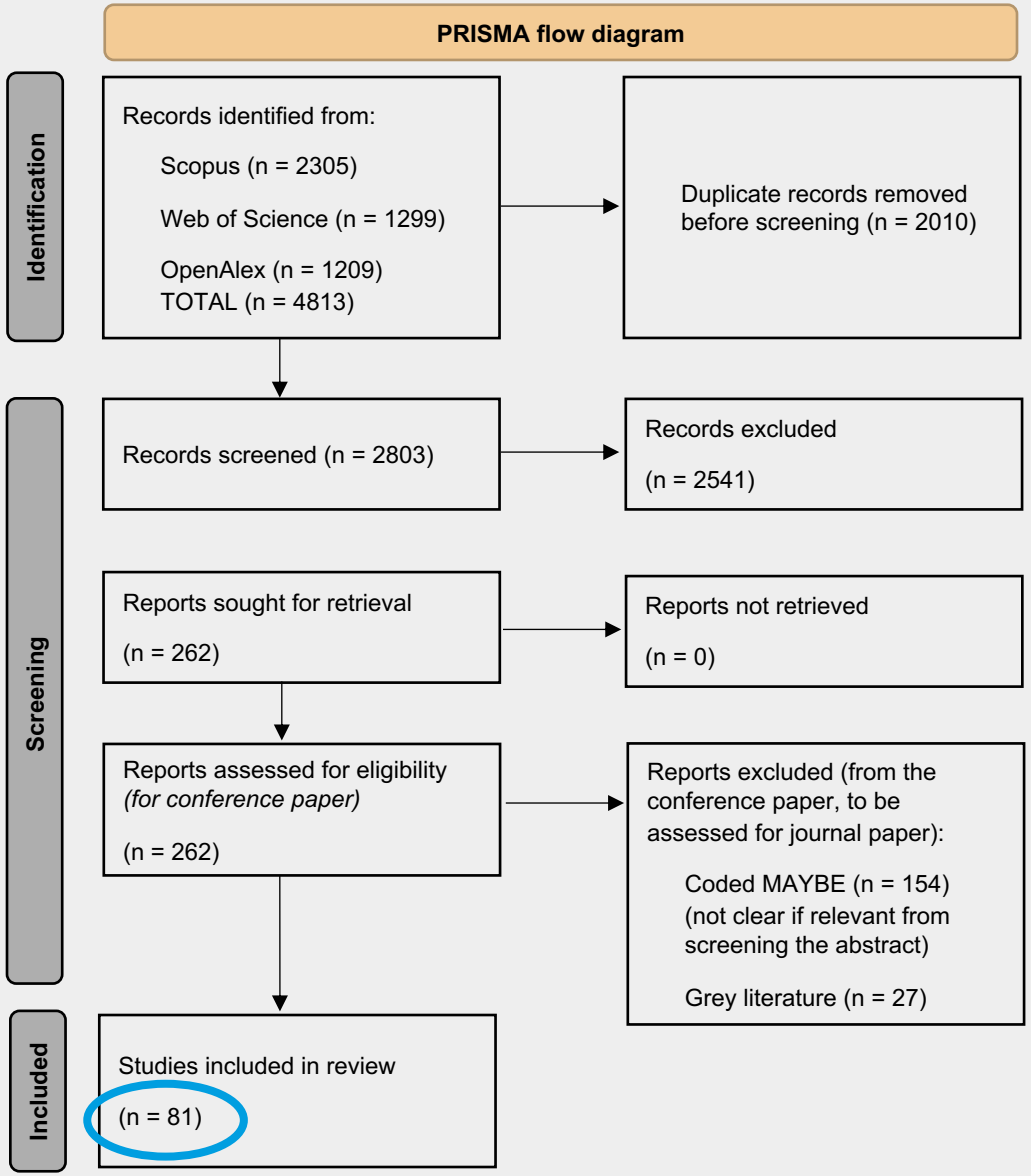
- Starting point: **Validation dataset** (29 publications on the topic)
- From this, we develop a **keyword-based query** for document retrieval
- This query consists of two parts:
  1. It searches for the **terms** ‘renewables pull’, ‘green relocation’ and similar terms
  2. It uses a **combination of keywords** from four groups to capture additional papers:
     (a) keywords describing industry and energy-intensive sectors
     (b) renewable energy keywords
     (c) keywords related to cost comparison and economic development
     (d) decarbonization and energy transition keywords
- We tested the query initially with the **Scopus** bibliographic database and then translated it to also search **Web of Science** and **OpenAlex**. We ran the search on July 2, 2025.


PRISMA flow diagram
Identification
Records identified from:
Scopus (n = 2305)
Web of Science (n = 1299)
OpenAlex (n = 1209)
TOTAL (n = 4813)
Duplicate records removed before screening (n = 2010)
Screening
Records screened (n = 2803)
Records excluded
(n = 2541)
Reports sought for retrieval
(n = 262)
Reports not retrieved
(n = 0)
Reports assessed for eligibility
(for conference paper)
(n = 262)
Reports excluded (from the conference paper, to be assessed for journal paper):
Coded MAYBE (n = 154)
(not clear if relevant from screening the abstract)
Grey literature (n = 27)
Included
Studies included in review
(n = 81)

# **Mapping** of the identified literature

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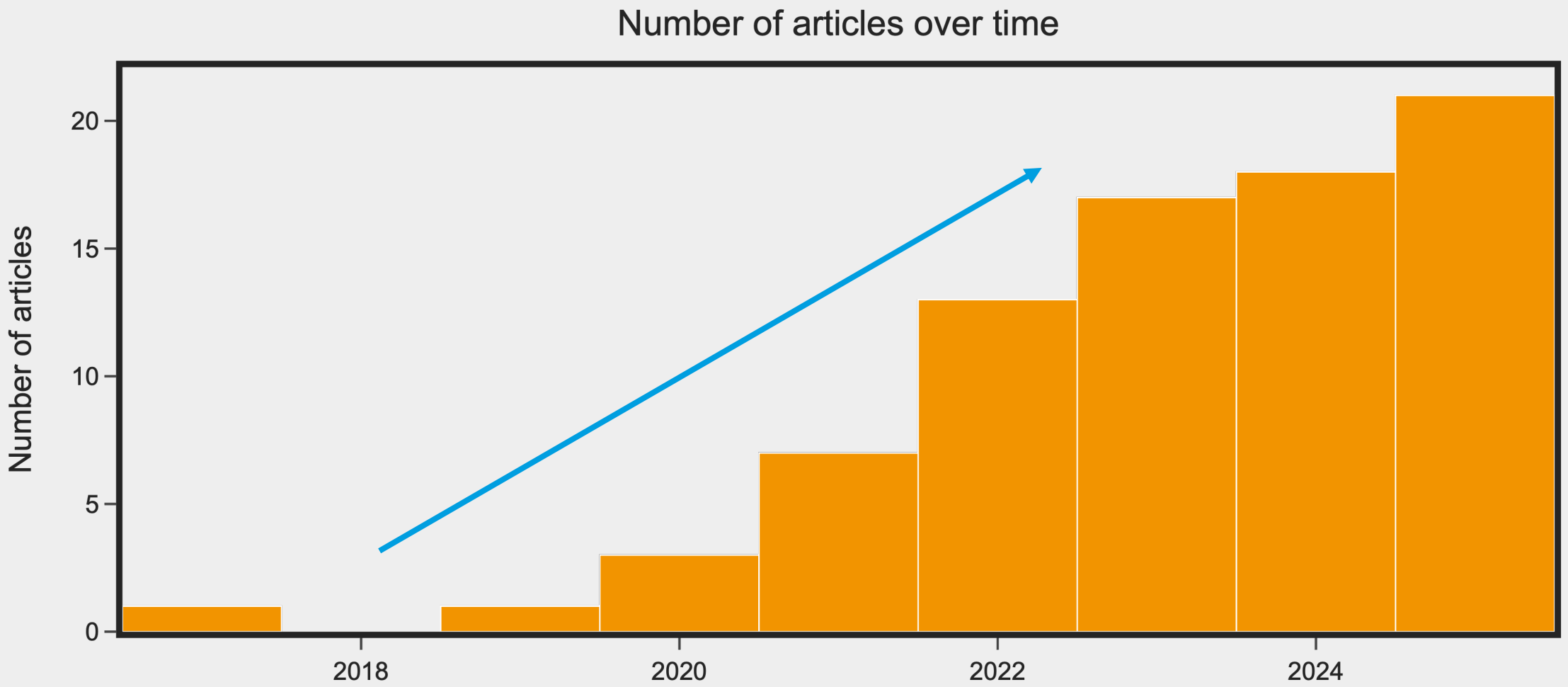

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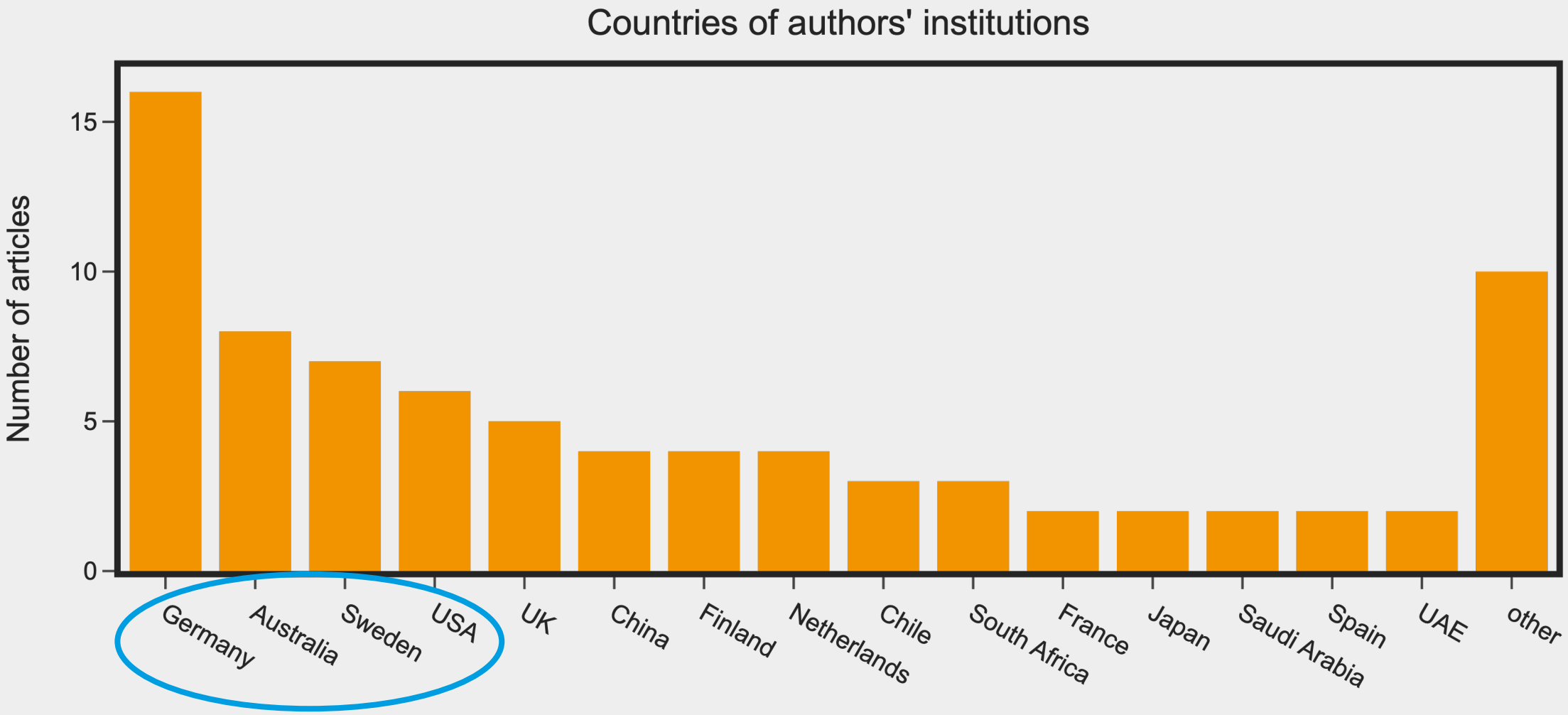

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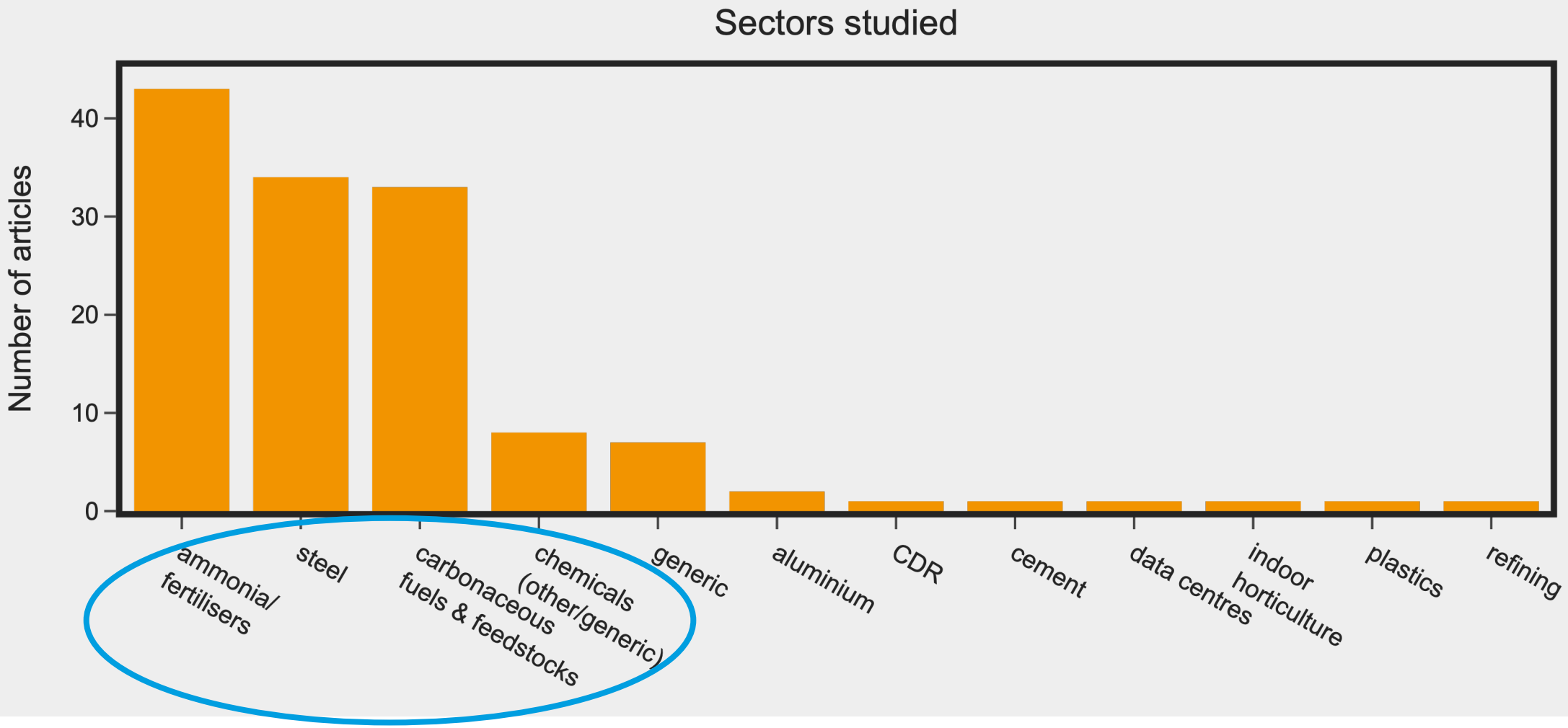

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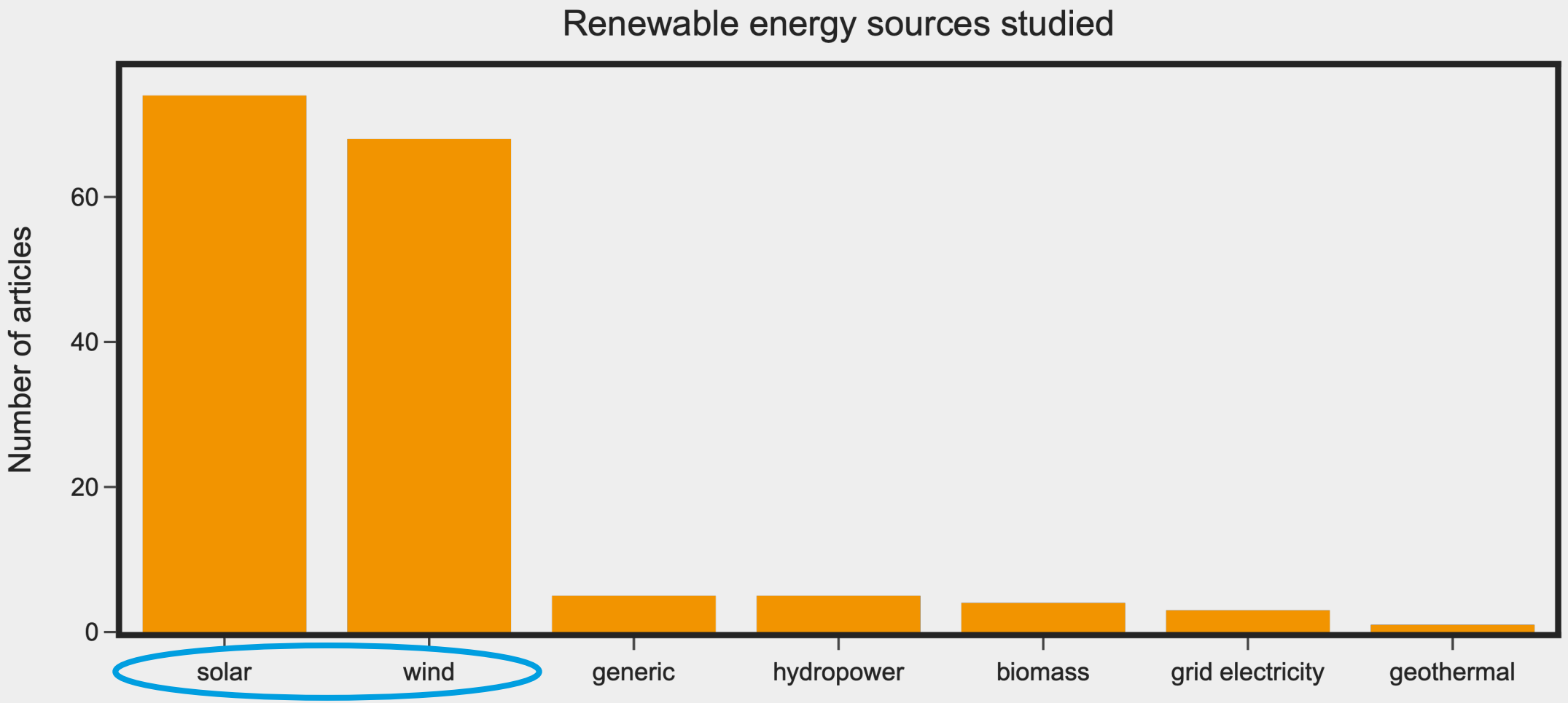

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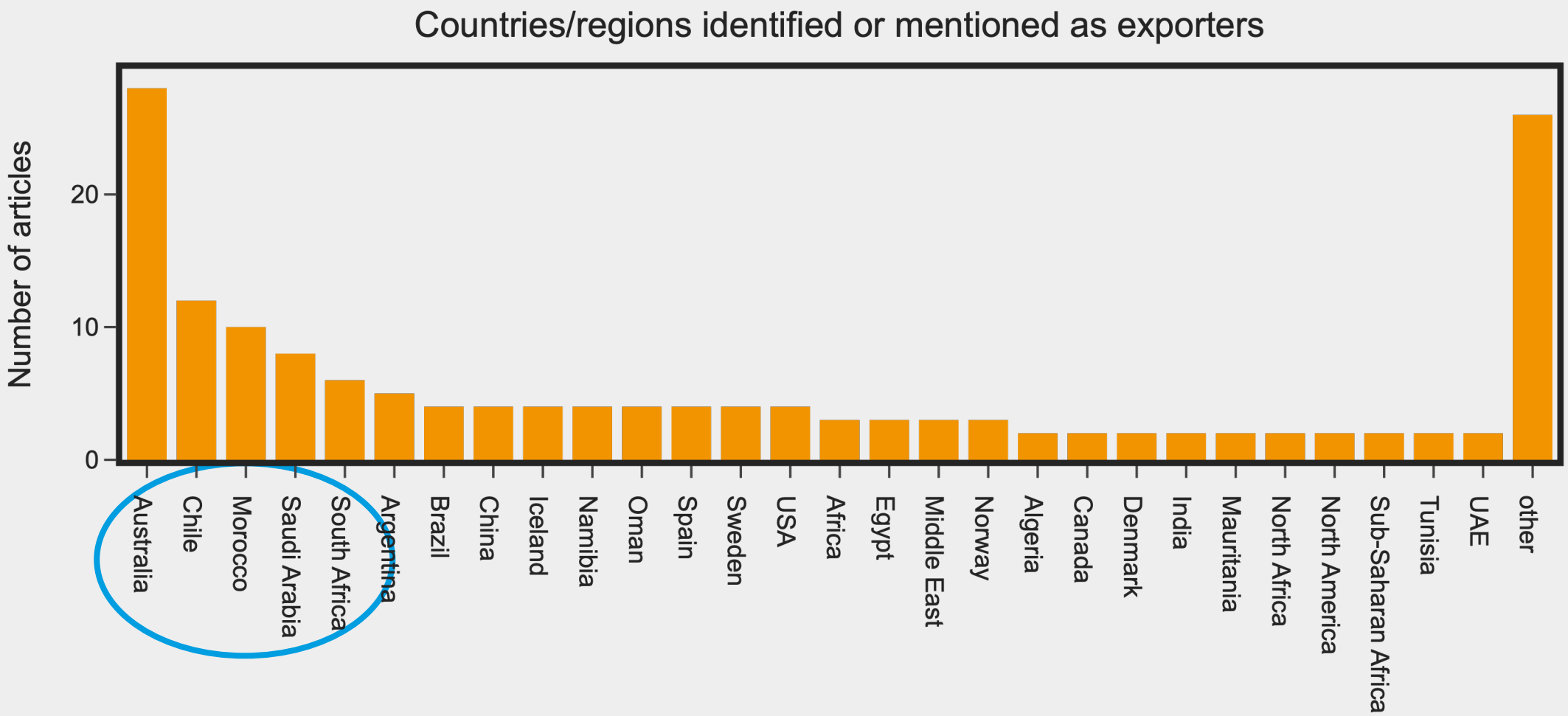

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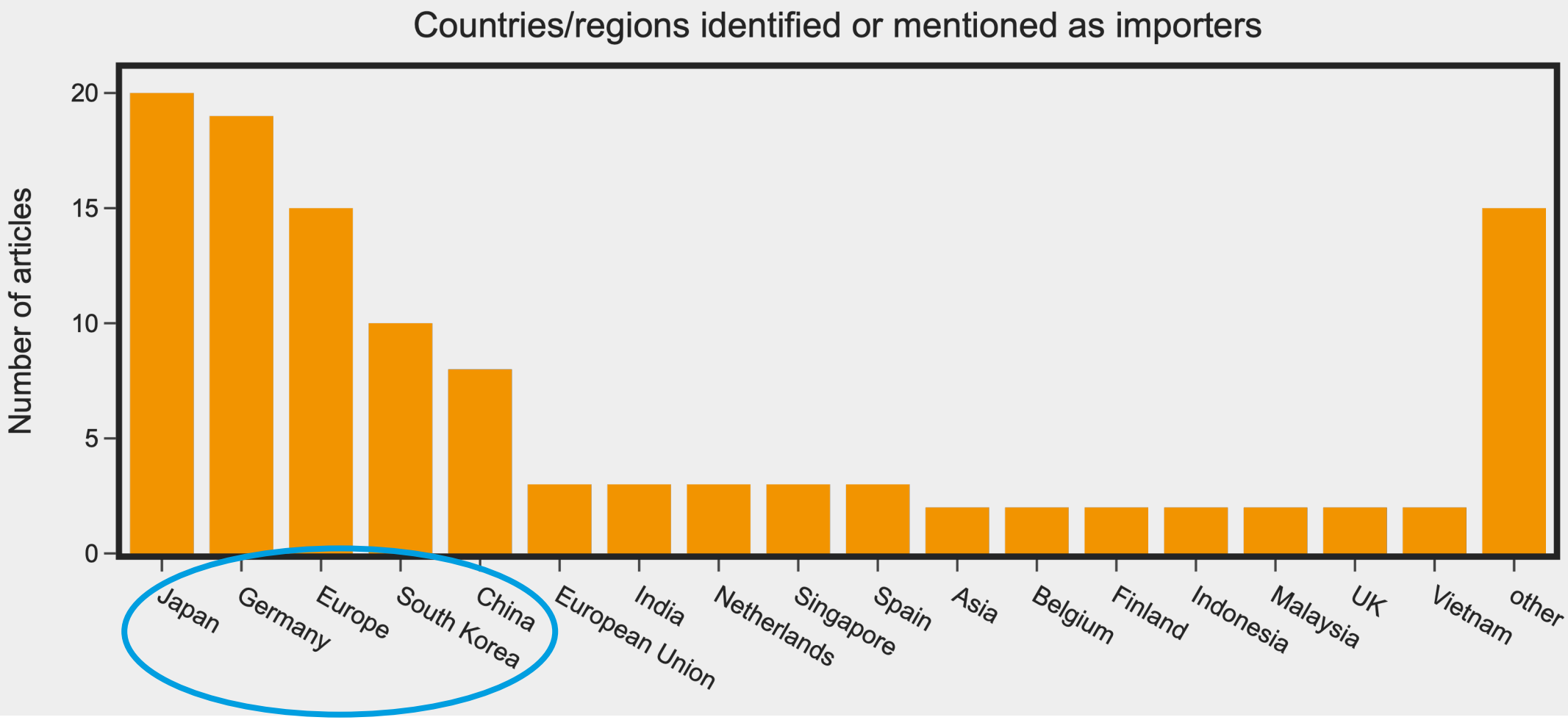

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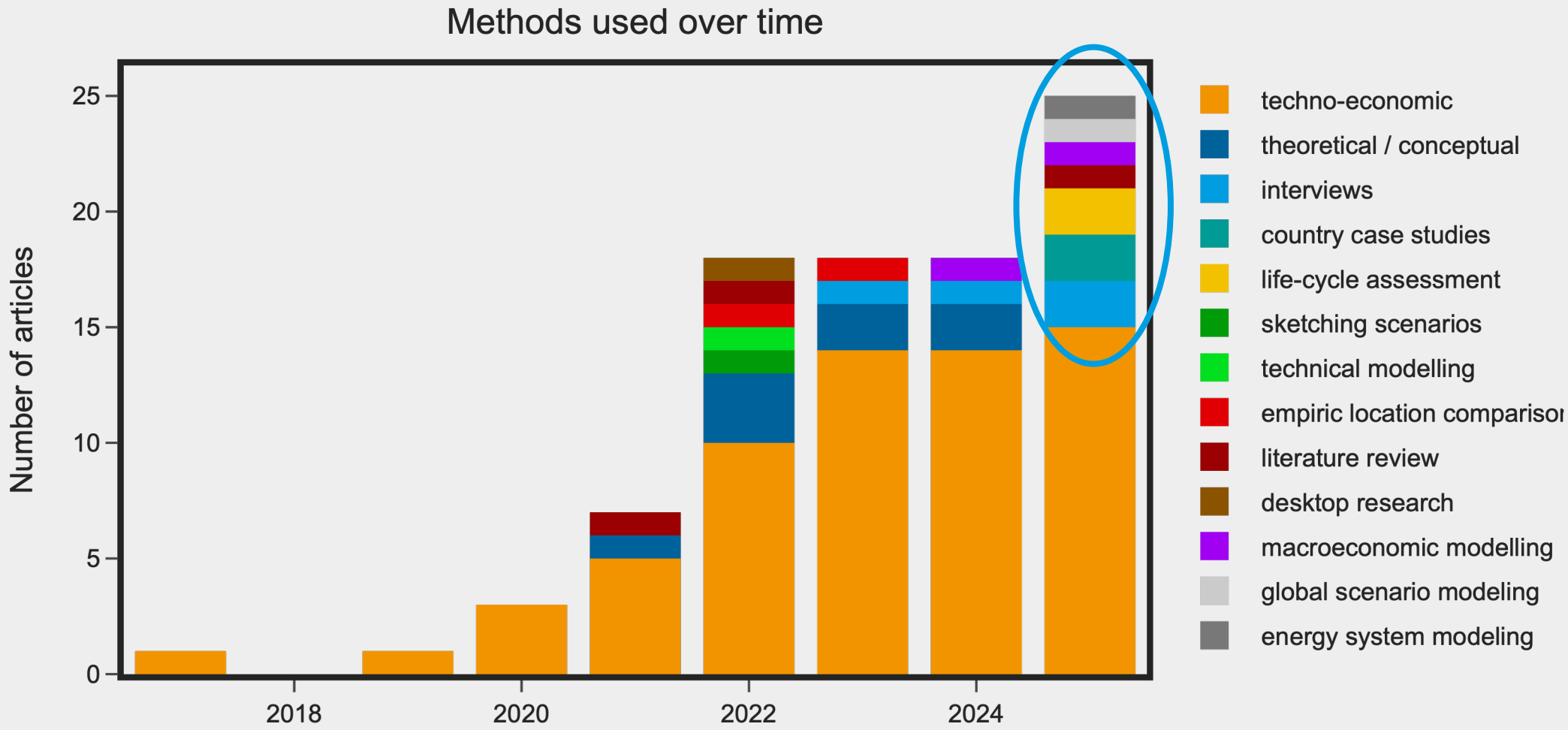

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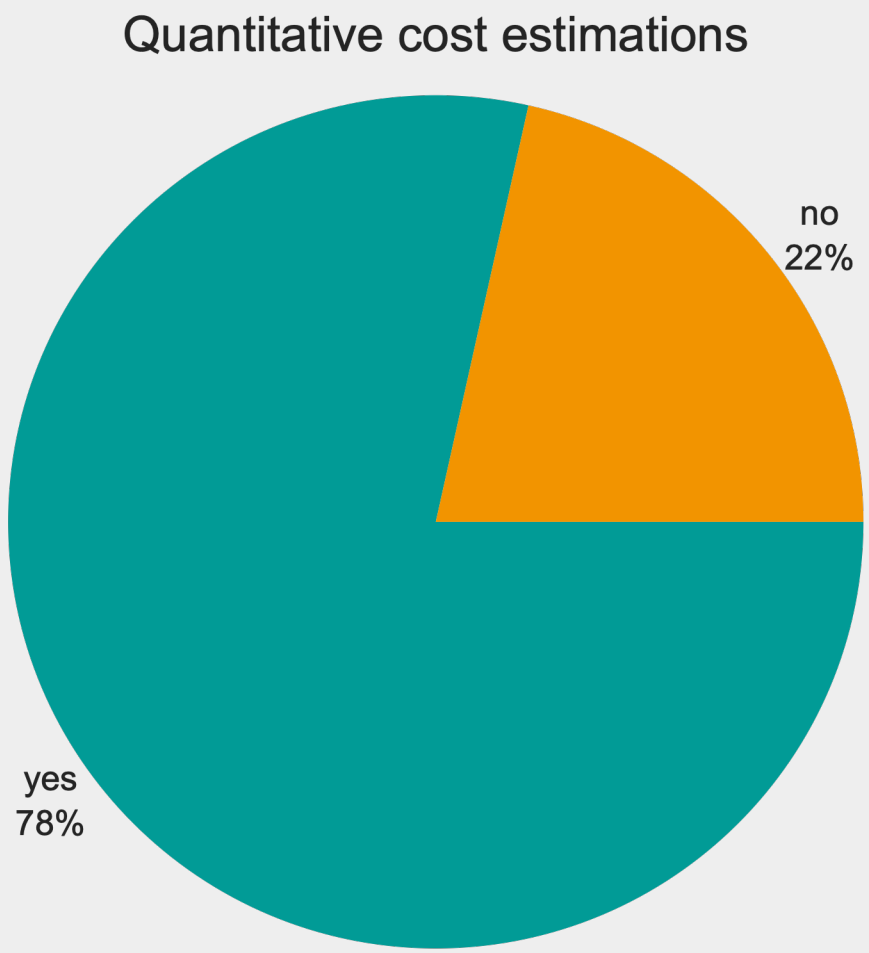

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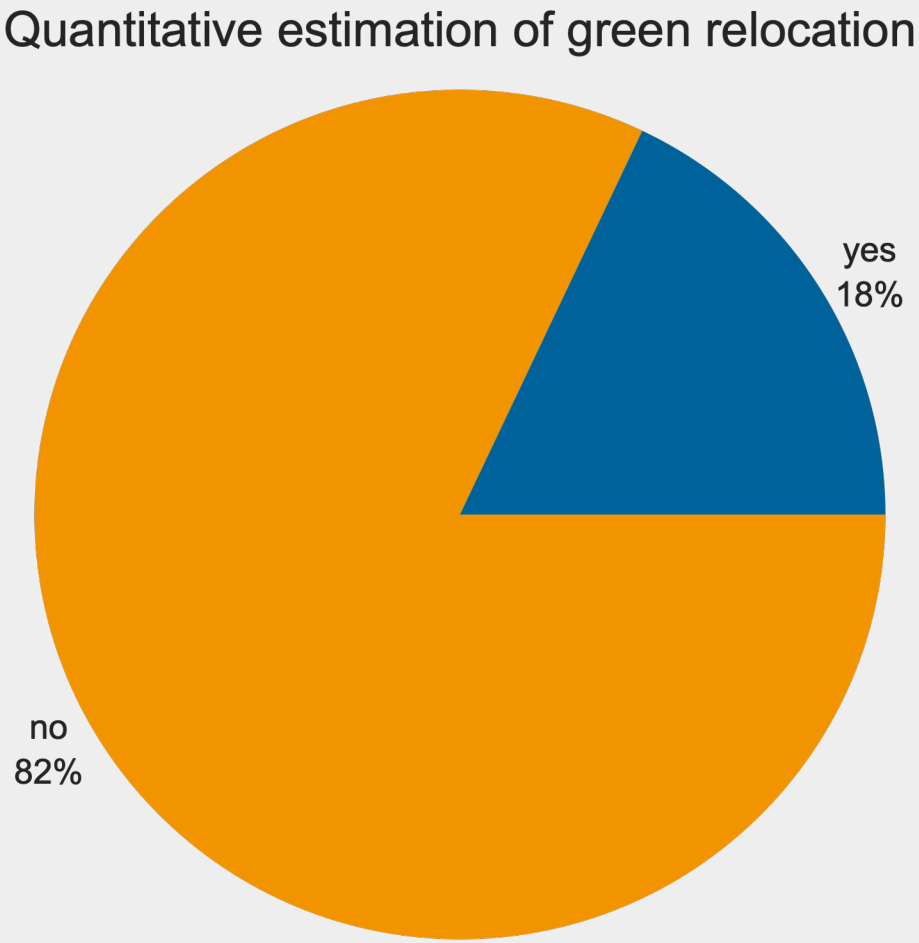

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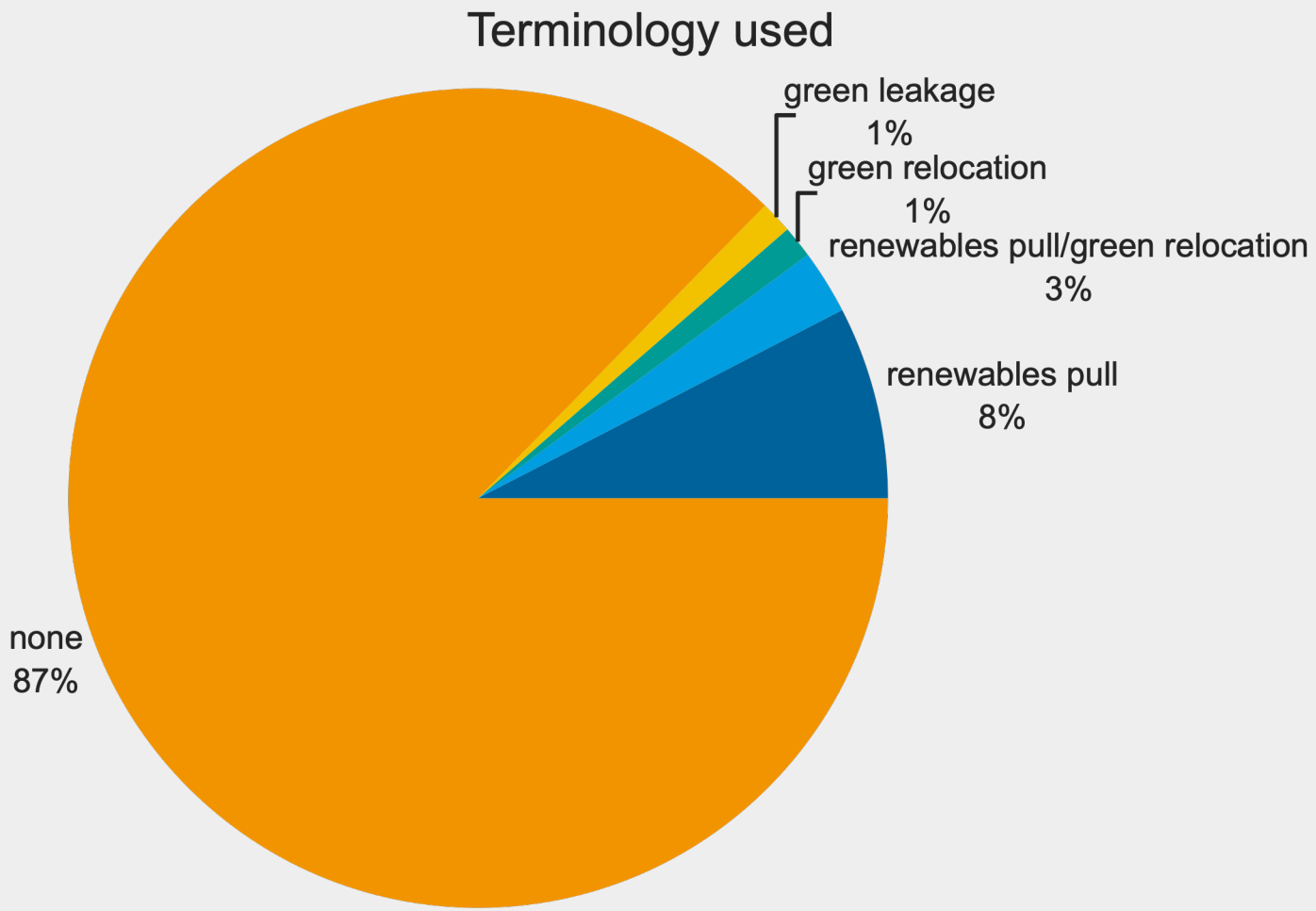

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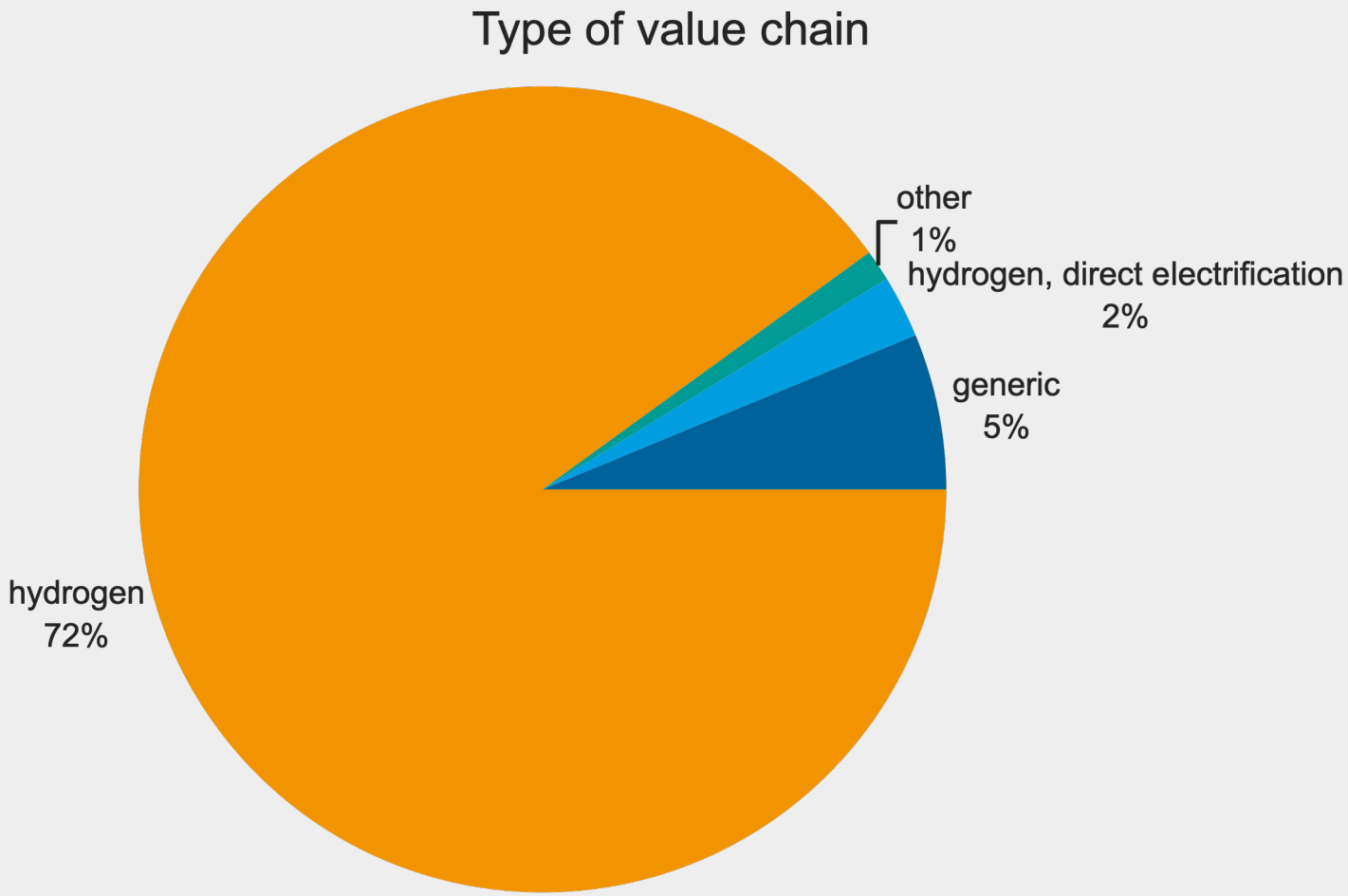

# **Key findings** from the identified literature

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*(selected key findings)*

- Many studies indicate a future relevance of the green relocation phenomenon
- Green relocation can support global climate action and a more even distribution of economic wealth
- Some arguments found in the literature for a limited future relevance of green relocation:
  - Agglomeration benefits and benefits of proximity to demand centres
  - Provision of substantial subsidies in renewable-restricted regions
  - Key political, legal, environmental and social prerequisites may be lacking in some renewable-rich regions
  - Other forms of low-carbon production may be more economical than production based on renewables

# **What's next?** – Future research needs

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*(preliminary)*

- Deeper understanding of the energy system implications of green relocation for renewable-restricted regions (including energy system costs and scope of energy infrastructure needed)
- Consequences for competitiveness of downstream value chains in renewable-restricted regions
- Evaluation of policy options for countries on both sides of the renewables pull
- Analysis of additional energy-intensive sectors that may be affected by the renewables pull (e.g. aluminium, paper, glass)

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# Thank you!