Green Windows of Opportunity

Latecomer development in the age of transformations toward sustainability

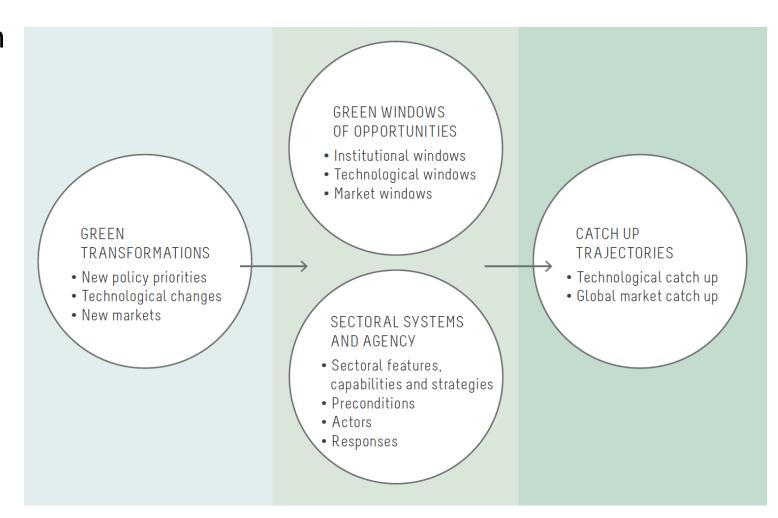
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Research questions and framework

- Is the green transformation opening new latecomer development opportunities?
- What are the conditions and dynamics of green latecomer development?
- Do we need new conceptual frameworks to understand the determinants of changes in green industry leadership?



Empirical studies

- Focus on experiences of renewable energy industries in China (and globally)
- Insights from combining sectoral case studies and cross-cutting analysis
- Seven articles brought together in Industrial and Corporate Change, Volume 29, Issue 5

Sectoral studies

Biomass



Concentrated Solar Power



Hydropower



Solar PV

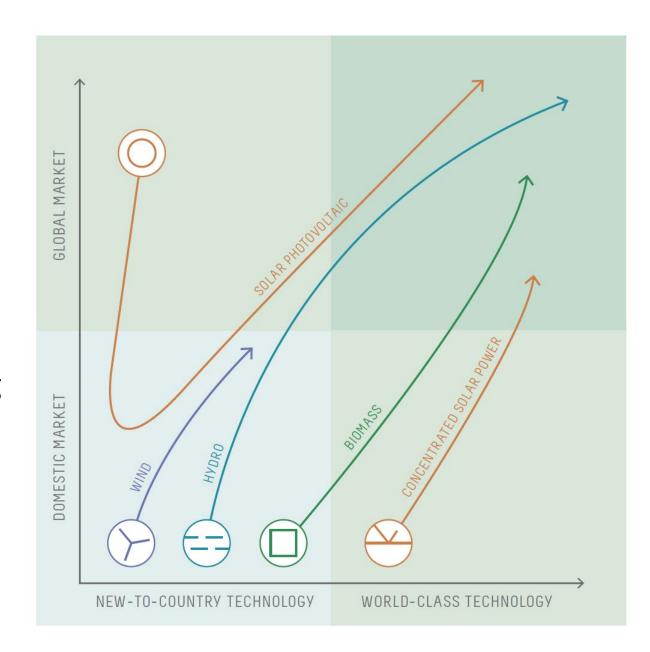


Wind power



Key findings

- There is significant variability in catch up trajectories at the sector level
- Common finding: institutional (policy) changes open new *green windows of opportunities* (GWOs)
- Sectoral characteristics and technological maturity (standards) are key in explaining variability
- Opportunities depend on the actions of firms and other public and private actors in the sectoral system of innovation.



Green windows of opportunity - so what?

Takeaways

- There can be important synergies between green transformation efforts and latecomer catching up
- Support policies need sector-specific approaches
- Catching up has important implications for global competition and collaboration along value chains and it differs markedly from sector to sector

Implications and new questions

- Can Chinese experiences be emulated elsewhere?
- Are there lessons relevant for 'global challenge-led windows of opportunities' in other industries, e.g. health?
- How different are the impacts of new and emerging technologies on green transformations in advanced and emerging economies?

Overview of papers

Lema, Fu and Rabellotti (2020): <u>Green windows of opportunity: latecomer development in the age of transformation toward sustainability</u>, ICC (29)5, p. 1193–1209

Zhou, Miao and Urban (2020): <u>China's leadership in the hydropower sector: 'identifying green windows of opportunity for technological catch-up</u>, ICC (29)5, p. 1319–1343

Dai, Haakonsson and Oehler (2020): <u>Catching up through green windows of opportunity in an era of</u> <u>technological transformation: Empirical evidence from the Chinese wind energy sector</u>, ICC (29)5, p. 1277–1295

Hansen and Hansen (2020): <u>How many firms benefit from a window of opportunity? Knowledge spillovers, industry characteristics, and catching up in the Chinese biomass power plant industry</u>, ICC (29)5, p. 1211–1232

Hain, Jurowetzki, Konda and Oehler (2020), <u>From catching up to industrial leadership: towards an integrated market-technology perspective.</u> An application of semantic patent-to-patent similarity in the wind and EV <u>sector</u>, ICC (29)5, p. 1233–1255

Binz, Gosens, Yap and Yu (2020): <u>Catch-up dynamics in early industry lifecycle stages—a typology and comparative case studies in four clean-tech industries</u>, ICC (29)5, p. 1257–1275

Landini, Lema and Malerba (2020) <u>Demand-led catch-up: a history-friendly model of latecomer development in the global green economy</u>, ICC (29)5, p. 1297–1318

Thank you!



GREEN WINDOWS OF OPPORTUNITY: LATECOMER DEVELOPMENT IN THE AGE OF TRANSFORMATION TOWARDS SUSTAINABILITY

Available at:

https://academic.oup.com/icc/issue/29/5#1186166-6137243

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