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Regional Graphic

The geography of green technology licensing in China

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Heatmap gy license agreeme a, linking regional n (licensee ies. It highlight cluded within the s s from a netw a, in particula ork visualiza

KEYWORI

green tech

JEL CLASSIFICATIONS:

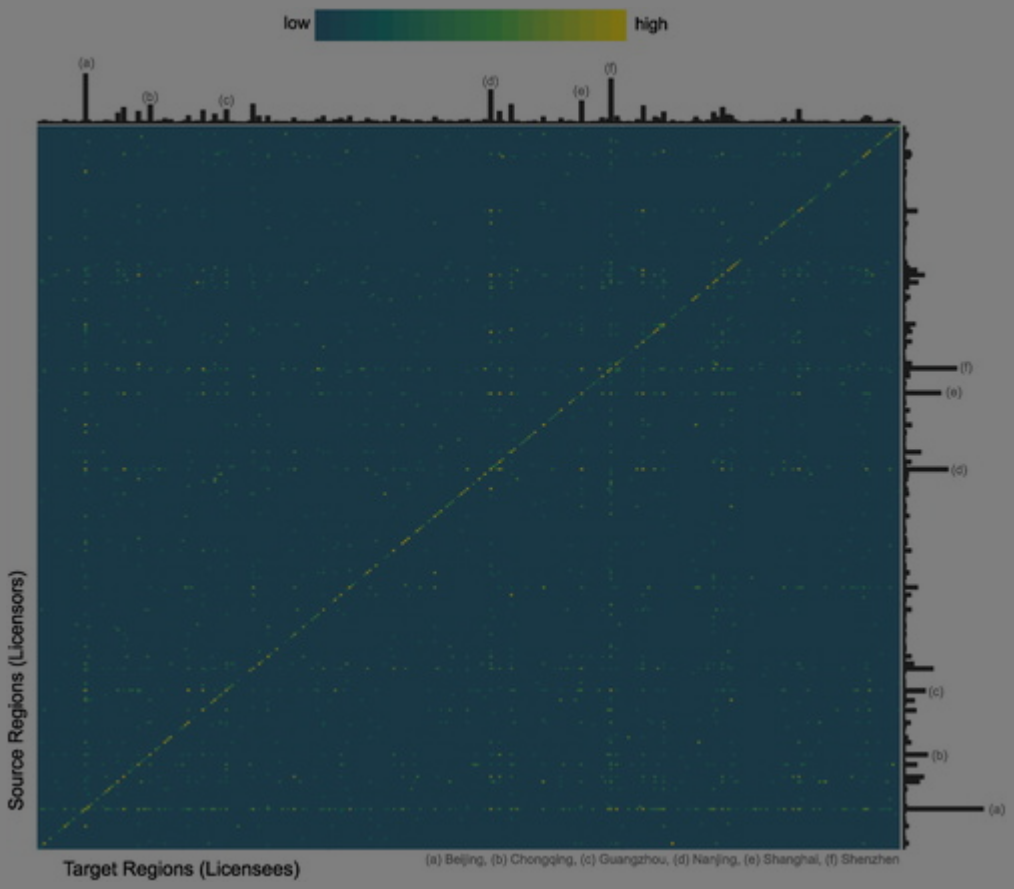
O33 O34 R11 R12

The adoption of green technologies is crucial for tackling climate change and offering solutions to resource depletion and further environmental challenges. While there is a growing body of literature on the geography of green technology development (Barbieri et al., 2020), research on adoption and diffusion is scarce. This regional graphic provides information on the geography of license agreements for green technology patents in China, highlighting the importance of intra-regional diffusion processes.

A license agreement is a contract between a licensor (patent owner) and a licensee who is authorized to make use of the technology. Licenses thus allow the measurement of both innovation development and innovation adoption. The data underlying this graphic was retrieved from IncoPat, a Chinese patent database listing license agreements. Green technology patents were identified using the ENV-TECH classification (Haščič & Migotto, 2015). A geocoding process was then employed to regionalize the licensor and licensee addresses to the prefectural level, resulting in a data set of 9396 license agreements for 8565 patents. To be specific, licensor addresses from the patent documents were geocoded using the open-source GeoNam sed to obtain lo , licensors and licer e regional informat matrix A with the number of licensed s). This data represer logies, whic this often leads 57% of all license a eading to a relativel however, differs b %; Beijing, 51%; Sh

Figure 1. ology patent license agreements. Note: A high number of license agreements is indicated by a

lighter colour (log scale). Bars indicate the number of licensors (right) and licensees (top) per region. Licensing data was retrieved from IncoPat (www.incopat.com); the graphic was created in R using the superheat package (Barter & Yu, 2018). Licenses with commencement dates ranging from 2008 to 2019 were used; design patents were excluded.



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Additional information

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