



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

Patents and clean energy in Africa and Latin America

Evidence to support policy-making



Finding mitigation technologies in patents

- EPO has over **90 million** documents in its patent collection.
- **Y02** gathers CCMTs belonging to different technical areas under one umbrella.
- 1000 classification entries and over **2 million CCMT-related documents**.
- User-friendly access for non patent experts.

- **Y02C:** Greenhouse gases – capture or storage/sequestration or disposal
- **Y02E:** Greenhouse gases – emissions reduction technologies related to energy generation, transmission or distribution
- **Y02B:** Buildings - Climate change mitigation technologies in buildings, including the residential sector
- **Y02T:** Transport - Climate change mitigation technologies in the transportation of goods and persons
- **Y04S:** Smart Grids technologies - Remote network operation, smart metering, electric and hybrid vehicles interoperability, trading and marketing



Sneak-preview



- **Y02W for Waste**
 - wastewater treatment
 - solid waste management
 - Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation (e.g. bio packaging)

- 307.484 documents

- EPO-ICTSD side-event “**Technology in the 2015 Paris Agreement**” on 10 June.

Using the Y02

Espacenet
Patent search

- **For learning technical solutions**

- Access to 90 million documents from 90 patent authorities worldwide

- Available free-of-charge

-  powered by EPO and Google

EN > 31 languages including CN, JP, KR, RU

PATSTAT

- **For technology mapping and statistics**

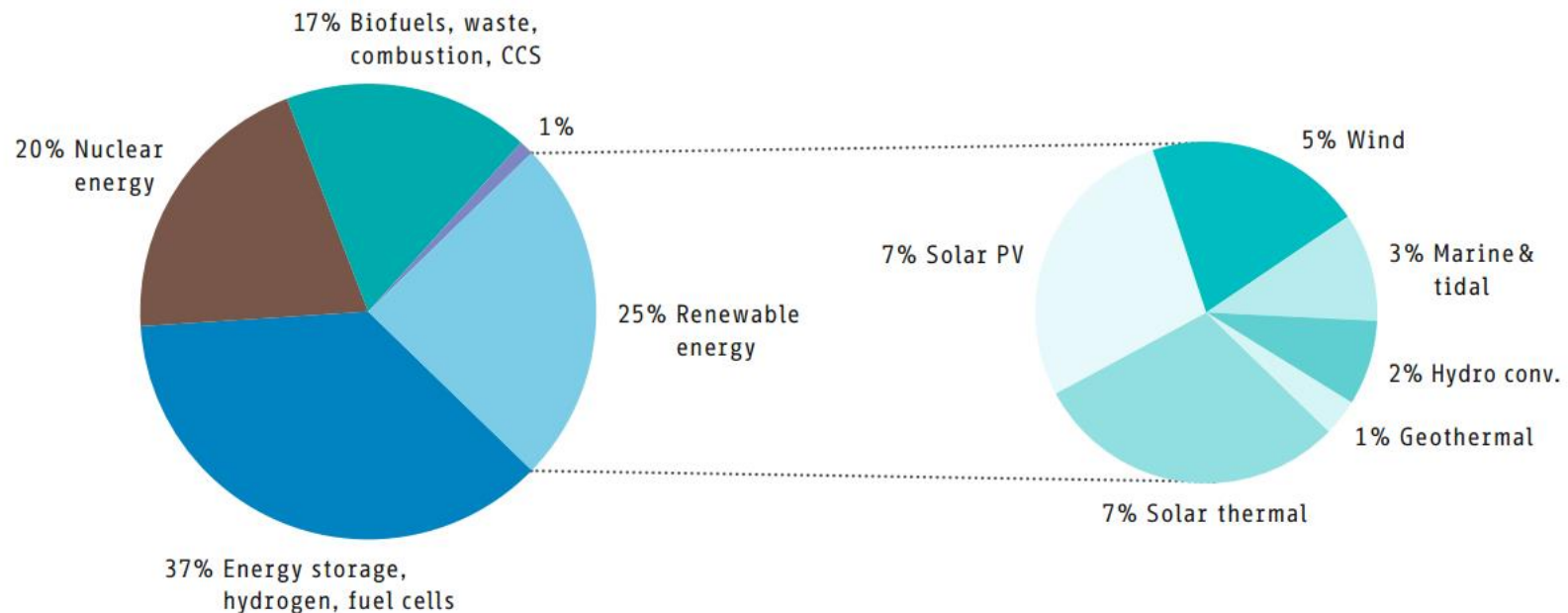
- 67 million patent applications from 100 patent authorities

- 40% of users are in governmental research/policy-making

Inventive activity in Africa

- South Africa is the major African inventor country (84% of filings)
- Most filings are in energy storage/hydrogen/fuel cell and renewables

04a* Counts of patents for each field 1980 – 2009 (Africa only)

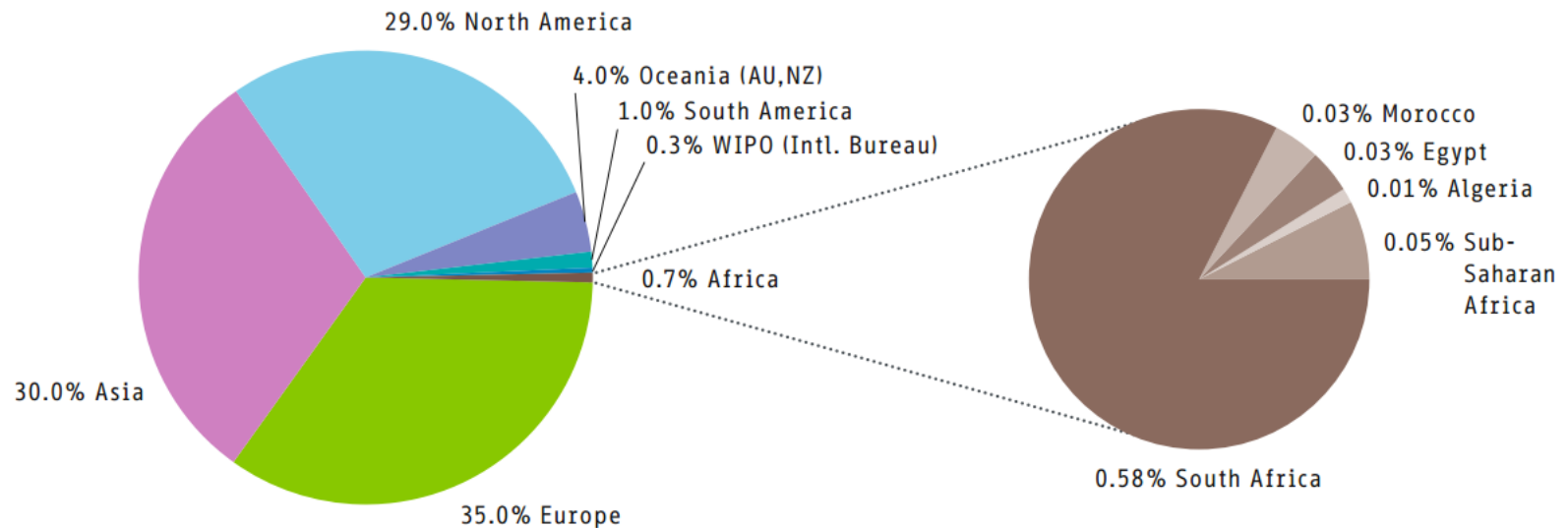


* The non-labelled 1% is for technologies related to efficient electricity generation, transmission and distribution.

Patents and clean energy in Africa

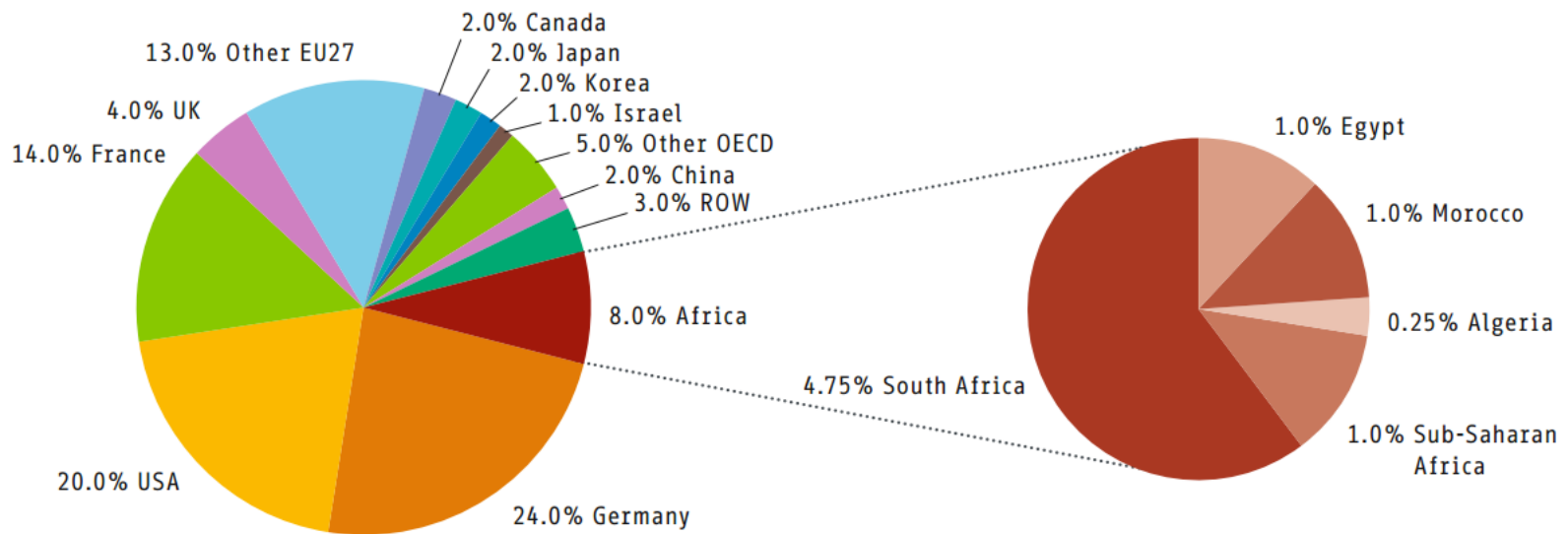
Less than **1%** of all patent applications on CETs have been filed in Africa

13 Patenting activity across different continents 1980–2009
(selected mitigation technologies – Y02, by application authority)



Ownership of patents in Africa

19 Patenting in Africa by inventor country 2000–2009
(patent applications registered at African patent offices,
by country of the inventor)

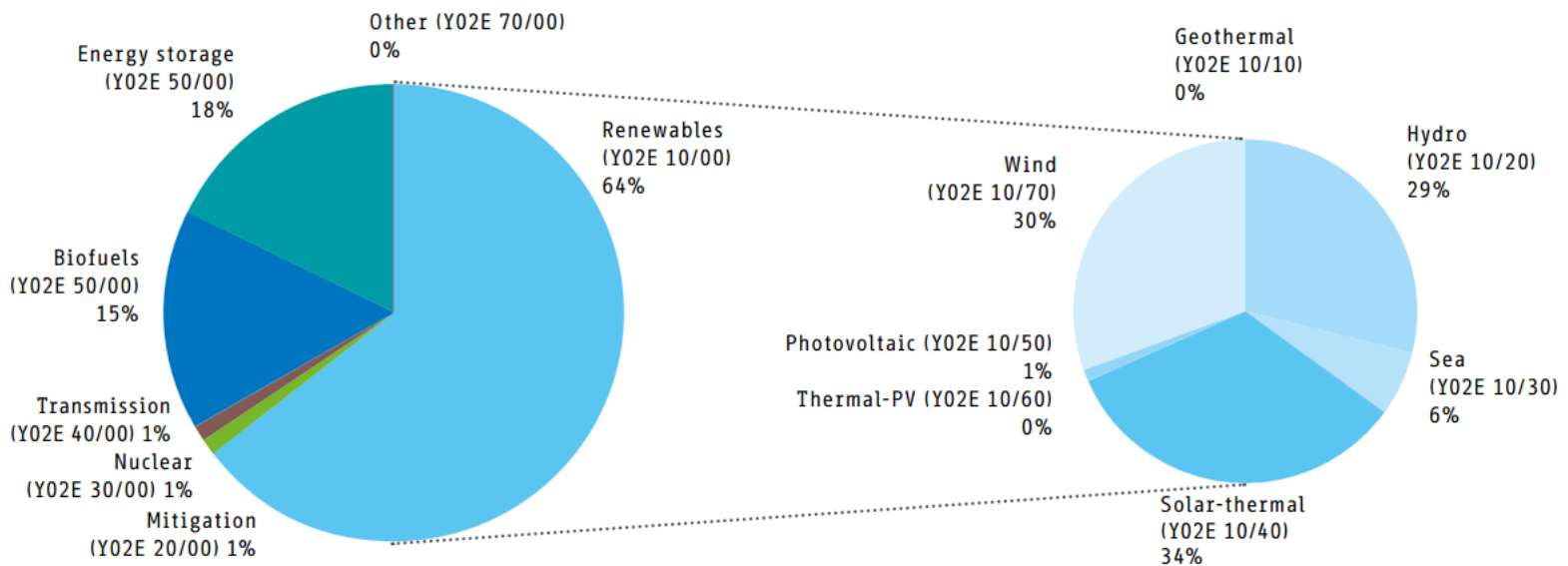


The figure shows data for 2000–2009. Few African inventions were patented in Africa prior to this period.

Inventive activity in Latin America

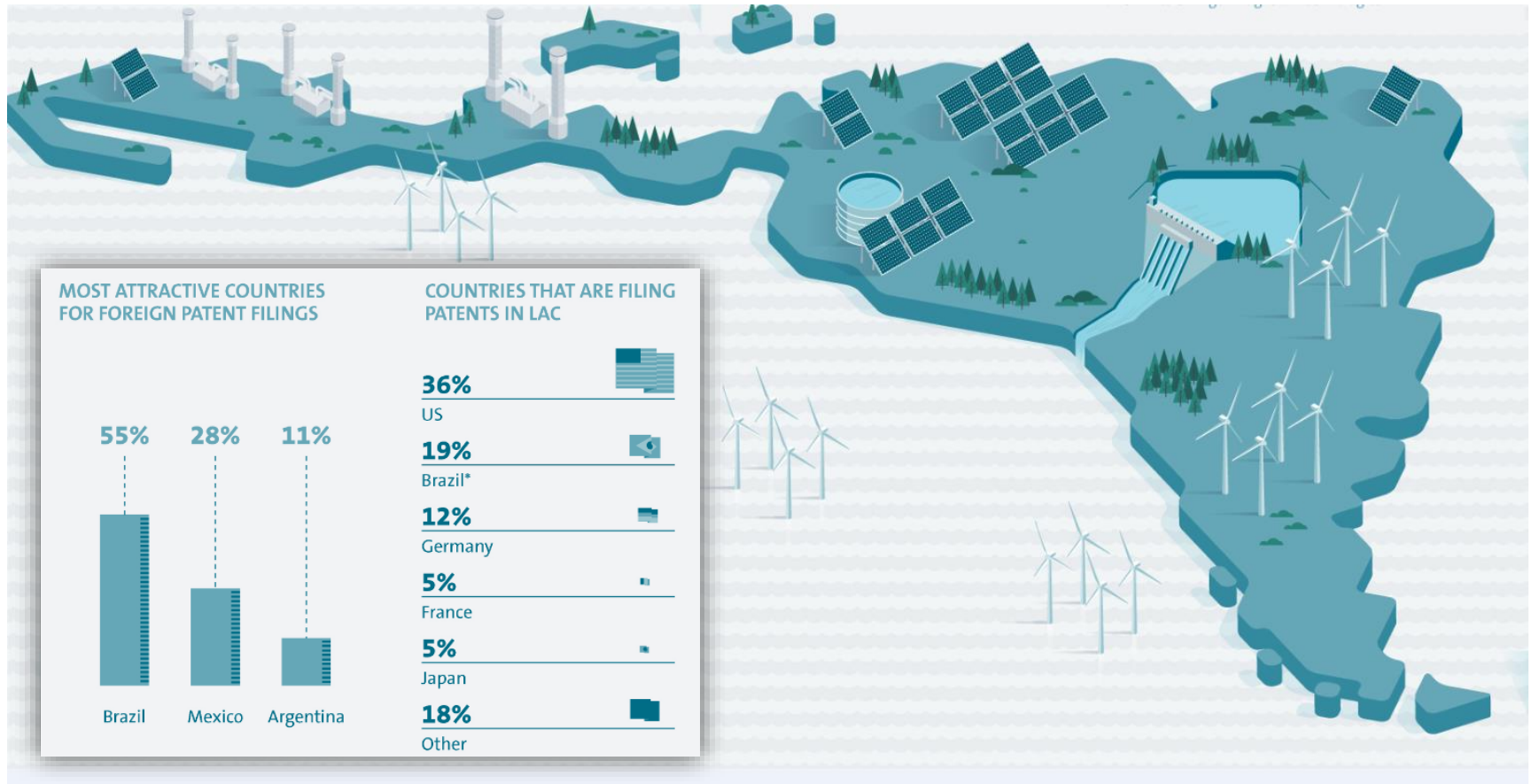
- Brazil dominates inventive activity (73% of filings), followed by Argentina and Mexico.
- Most filings are in renewable energy technologies.

12 Latin American inventors CCMT filings are dominated by renewable energy, in particular solar thermal, wind and hydro-electric



Patents and CCMTs in Latin America

Less than **3%** of all patent applications on CCMTs have been filed in LAC



Thank you for your attention



The EPO-UNEP and ICTSD reports:

www.epo.org/clean-energy

Africa Report:

www.epo.org/clean-energy-africa

LAC Report:

www.wpo.org/lac

Use Y02 in Espacenet

www.espacenet.com

www.epo.org/y-classification

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