

MapYourGrid

Enabling power grid mapping with appropriate tools



State of the map Europe 2025
Dundee

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MapYourGrid at SOTM Europe 2025



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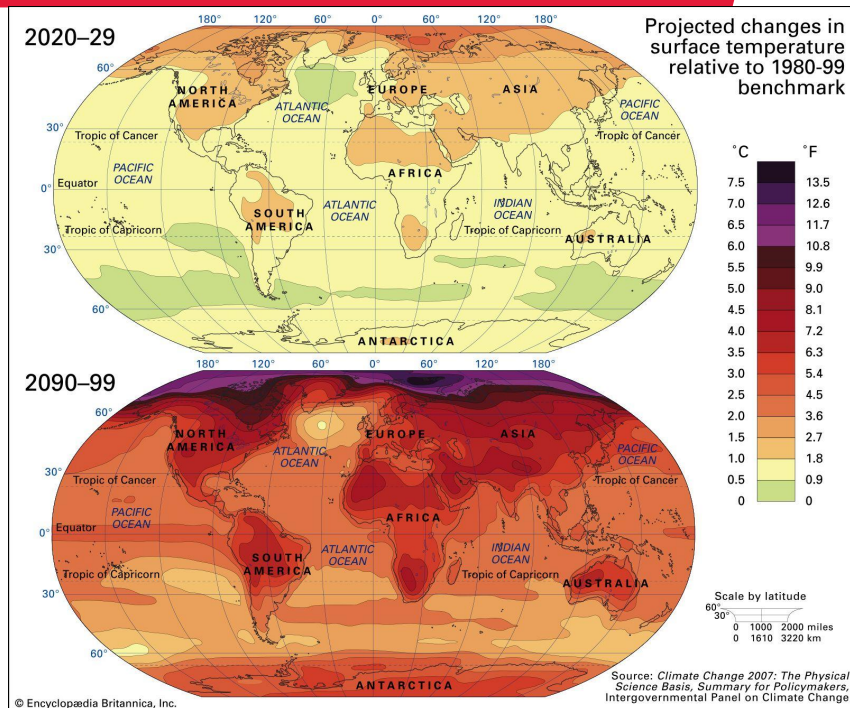
Good morning!

Today, we aim to explore how OpenStreetMap is crucial for energy transition

1. Introduction on our initiative
2. A tour of the tools we provide
3. Practice together in groups



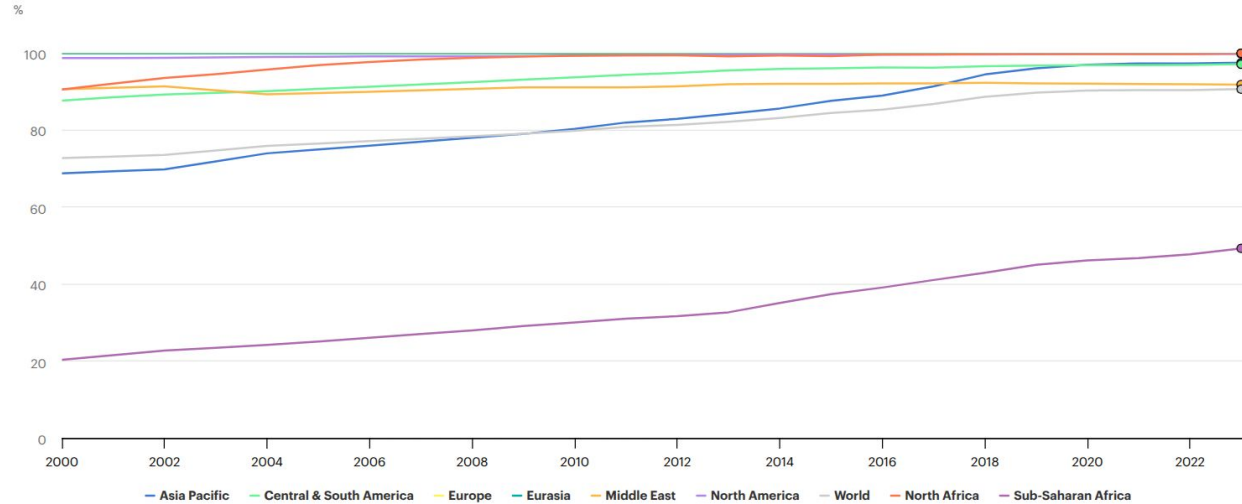
What's wrong?



What's wrong?



Share of population with access to electricity



IEA. Licence: CC BY 4.0

Importance of Open Grid Data

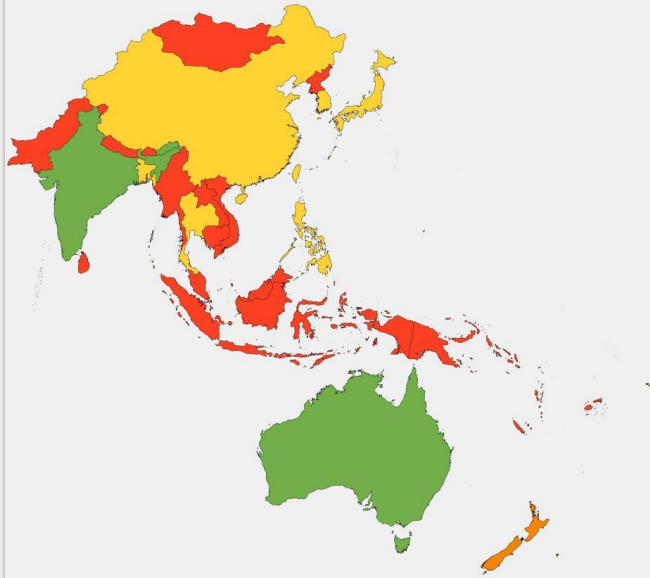


The lack of electricity data transparency in Asia and Oceania

EMBER

Our evaluation of publicly available data.

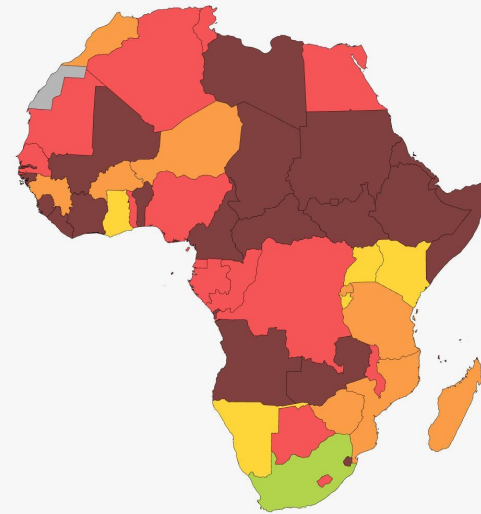
■ Little or no data ■ Poor ■ Insufficient ■ Acceptable ■ Good



Availability of national electricity data in Africa

EMBER

■ 0/5 - No publicly available data
■ 1/5 - Little or low-quality / old data
■ 2/5 - Annual mostly high-level data
■ 3/5 - Better-than-annual data with some disaggregation
■ 4/5 - Good (monthly or better) data with high detail
■ 5/5 - Real-time data of high quality



Source: Ember Africa data transparency report



“We empower individuals, communities and nations around the world to map the electrical grid.”

OpenStreetMap is a versatile platform used by anyone who comply with ODbL licence, for power modelling, asset management, natural risk mitigation...



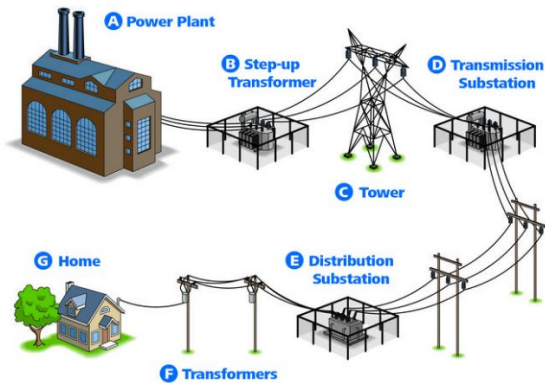
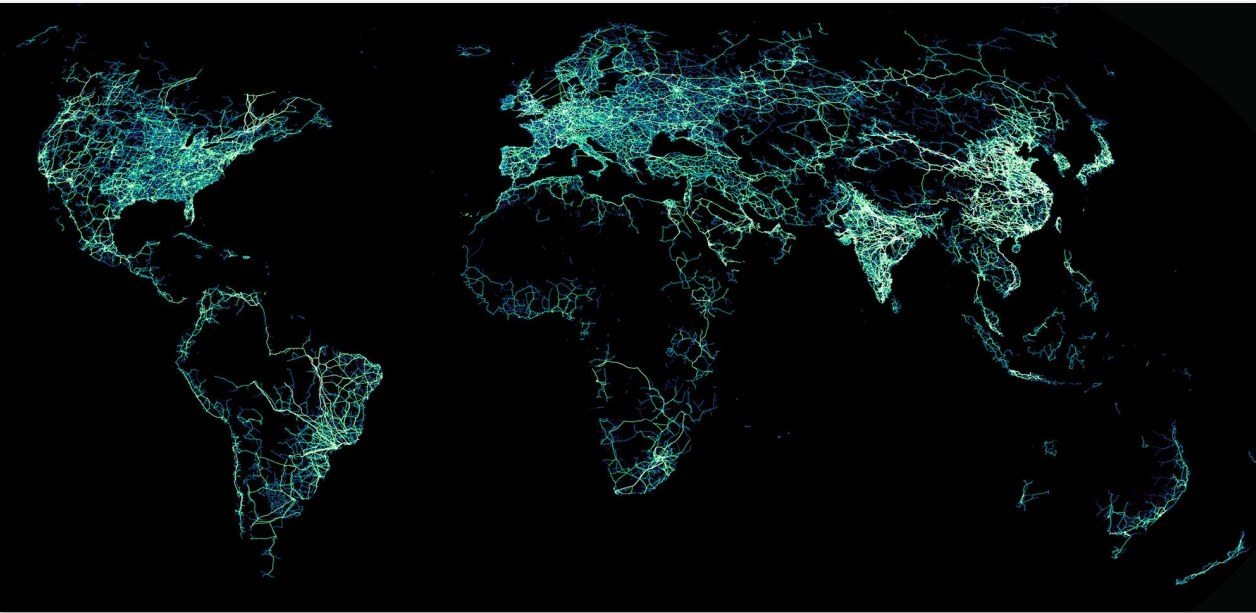
Why OSM ?



- **Unique collaborative worldwide database**
- **Existing wide tool ecosystem**
- **Dedicated tagging model for power grids**
- **Already used and contributed by significant power actors**

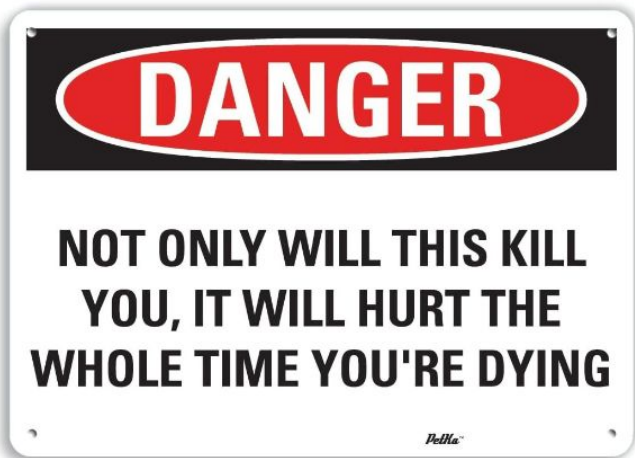


Transmission grids!



Always contribute safely

Don't trespass restricted perimeters and call before you dig!



Power facilities are always dangerous places. Mapping guidelines won't ever expect you to get inside. **Stay safe and always obey local regulations.**



François Lacombe - CC BY-SA 4.0

Underground networks are often disrupted by poorly planned works. Many countries now provide official processes to get you informed on time.

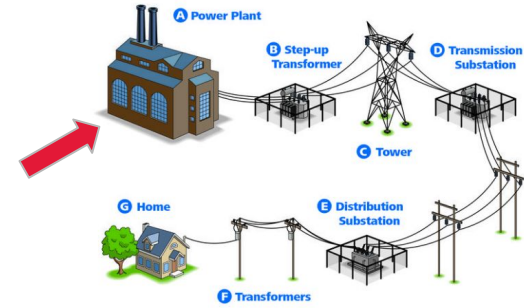
OpenStreetMap data must not be used for works planning.

Key tags

power=plant

power=generator

Places where electricity is generated, from various sources like biomass, fossil fuels, renewables or nuclear



Raimond Spekking - Wikimedia Commons - CC BY-SA 4.0

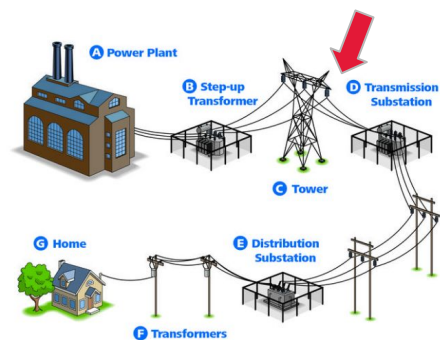


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Key tags

power=line

power=tower



**Electrical links that
transmit electricity from
plants to consumers**



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Kreuzschnabel/Wikimedia Commons,Licence Artlibre

Key tags

power=substation



David Neale / Legacy National Grid Substation / CC BY-SA 2.0

Industrial places where electricity is switched and transformed



ESRI World imagery

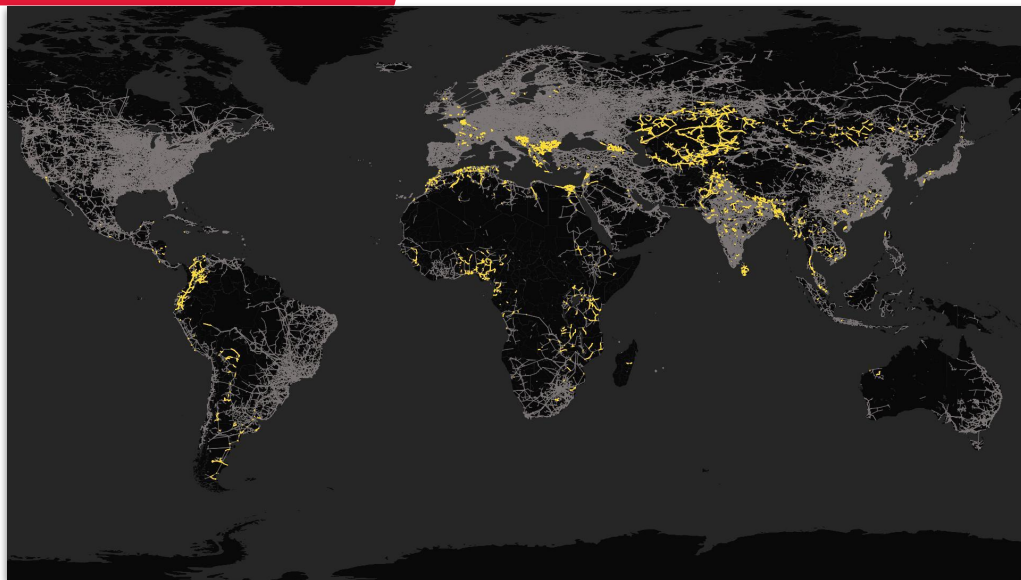


OpenStreetMap power mapping

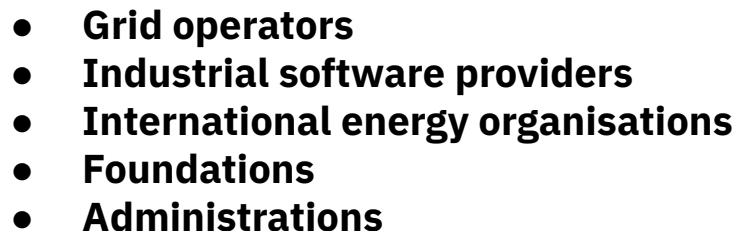


As of october 30th:

- 57 mappers using #mapyourgrid
- 300,000 towers added
 - 48,000 towers added by members of the community using #mapyourgrid
- 100,000km of power lines added by our team and #mapyourgrid changesets
- 5800 substations added/edited



Progress constantly updated at
<https://mapyourgrid.org/progress/>



A few tools



Training videos
Good first lines

“Map it!” web page

Editors customisation

Contribution monitoring

Quality assurance / health score
based upon Osmose QA

Map complete theme

OpenInfraMap

Overpass queries

Get in touch with us !



#mapyourgrid

mapyourgrid.org

<https://discord.gg/a5znpdFWfD>

www.youtube.com/@MapYourGrid
