

MOBILIZING CITIZEN ACTIONS AND FINANCE FOR ENERGY TRANSITION

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Introduction



IPCC (2018): Rapid transition to low carbon energy is required to avert climate catastrophe

IEA (2021): Net zero emission by 2050 is “viable but extremely challenging”

Background

Challenges for energy transition is oftentimes not technological but political one

What will it take to push a transformational movement for revolutioning energy system?

- (1) Government action
- (2) Grassroot activism
- (3) Broader coalition of business and civil society: business (e.g. finance) and citizen participation



Source: Liputan 6

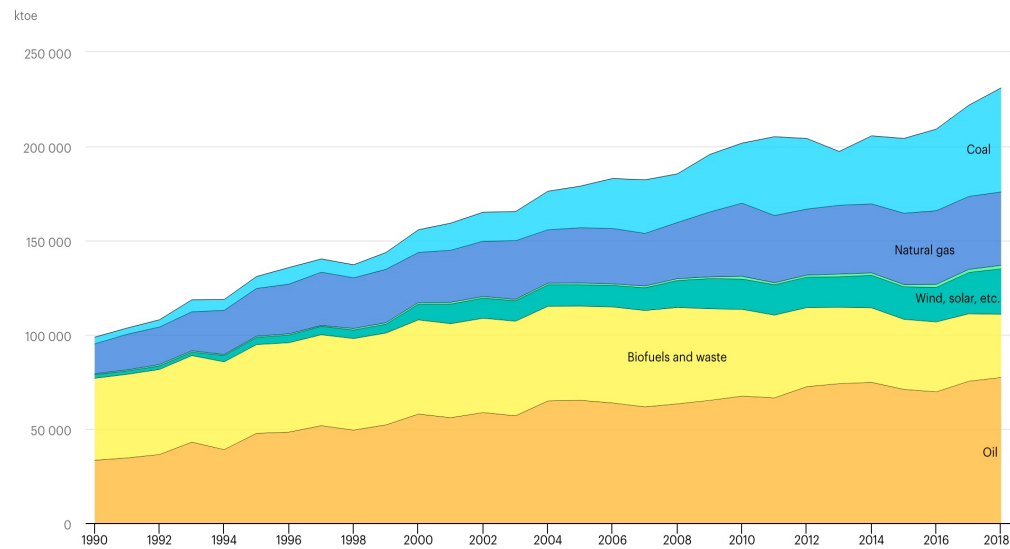
Outline

1. Energy profile in Indonesia vs Netherlands
2. Energy policies in Indonesia vs Netherlands
3. Citizen participation in energy transition in Netherlands and Indonesia
4. Business (particularly finance) institutions engagement
5. Key take away messages

Energy Profile

Indonesia

Total energy supply (TES) by source, Indonesia 1990-2018

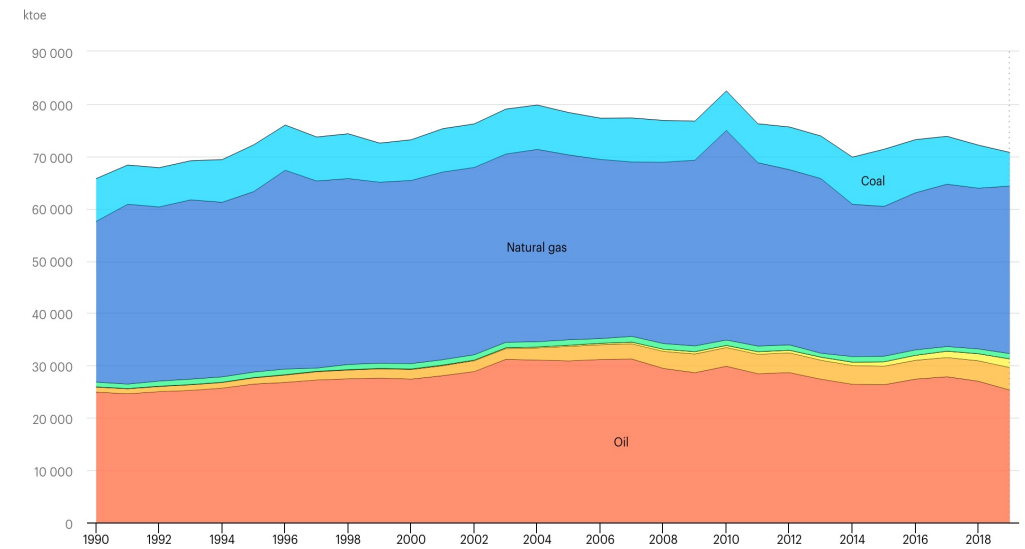


Screenshot

Source: IEA

Netherlands

Total energy supply (TES) by source, Netherlands 1990-2019



Screenshot

Energy and Climate Policy

Indonesia

- NDC: 29% and conditional reduction target up to 41 % by 2050.
- Energy transition target: NRE 23% (2025), 31% (2050)
- Renewable energy sources: solar, wind, hydro, biomass, etc
- Electricity market: vertically integrated with PLN's dominant role in electricity generation, transmission and distribution
- Consumers have constrained options for energy sources

Netherlands

- NDC: 49% by 2030 and by 95% by 2050
- Energy transition target: renewable energy 14% (2020); 16% (2023) and 100% (2050).
- Renewable energy sources: biomass, wind, solar, hydro, heatpumps
- Electricity market: diversified suppliers with several companies providing electricity
- Consumers can opt to get renewable energy sources for their electricity

Citizen participation in Netherlands

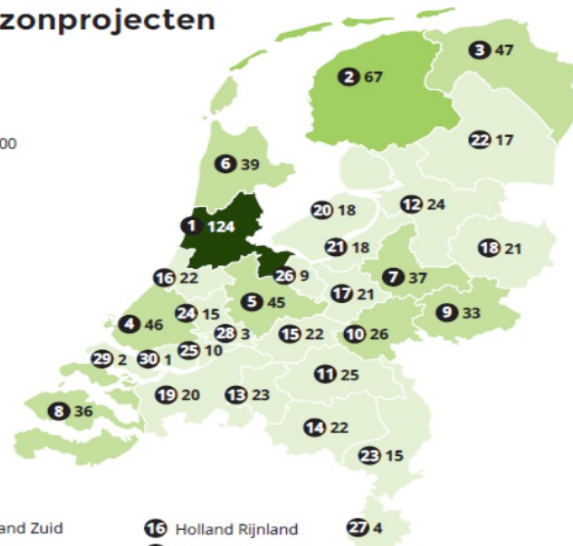
- More decentralized approach to energy transitions
- Encourage subnational government and local actors to participate in energy decisions (e.g. regional energy planning)
- Active participation of citizen to broaden spaces of public participation in energy decision
- Local cooperatives for renewable energy are flourishing.

Energy Cooperatives in Netherlands

Coöperatieve zon- en windprojecten per RES-regio

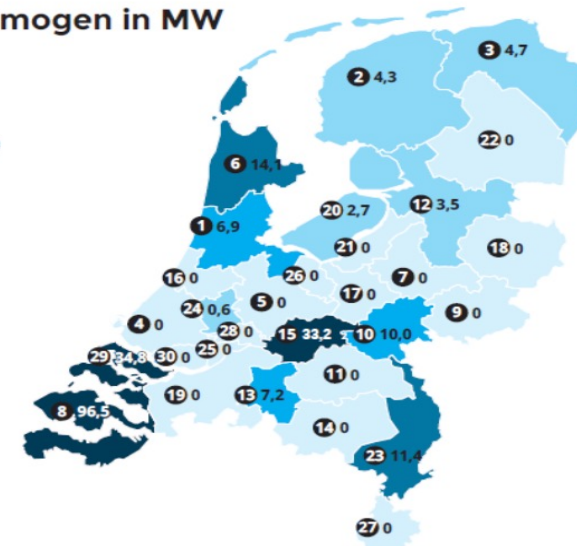
De stand van zaken in 2020

Aantal zonprojecten

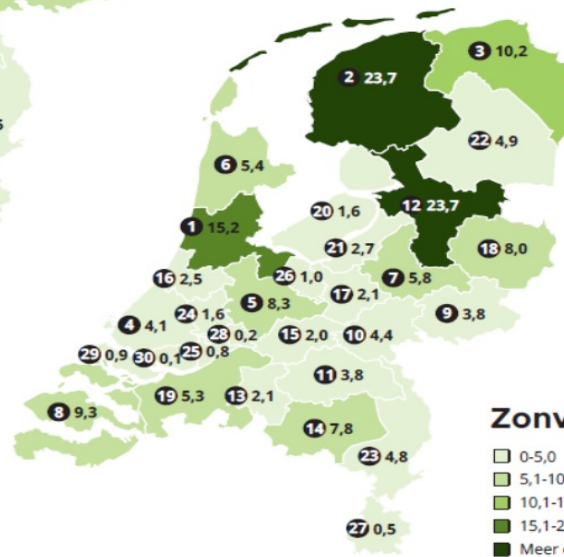


- | | |
|-----------------------------|-----------------------------|
| 1 Noord-Holland Zuid | 16 Holland Rijnland |
| 2 Friesland | 17 Food Valley |
| 3 Groningen | 18 Twente |
| 4 Rotterdam-Den Haag | 19 West Brabant |
| 5 U16 | 20 Flevoland |
| 6 Noord-Holland Noord | 21 Noord-Veluwe |
| 7 Clean Tech regio | 22 Drenthe |
| 8 Zeeland | 23 Noord- en Midden Limburg |
| 9 Achterhoek | 24 Midden-Holland |
| 10 Arnhem/Nijmegen | 25 Drechtsteden |
| 11 Noordoost Brabant | 26 Amersfoort |
| 12 West-Overijssel | 27 Zuid-Limburg |
| 13 Hart van Brabant | 28 Alblasterwaard |
| 14 Metropoolregio Eindhoven | 29 Goeree-Overflakkee |
| 15 Rivierenland | 30 Hoeksche Waard |

Windvermogen in MW



Zonvermogen in MWp



Bron: Lokale Energie Monitor 2020
Ga voor meer info naar hieropgewekt.nl/lokale-energie-monitor

Citizen Participation in Indonesia



- Emerging community energy initiatives across Indonesia
- Cooperatives (e.g. Amongsidhi cooperative, Bali, Bumdes), yet remain limited
- Engagement of subnational governments (relates to a **research project with TU Delft and ITB, funded by NWO**)
- Issues:
 - (1) sustainability
 - (2) limited financial options
 - (3) limited skills, especially in rural areas

Financing Energy Transitions

World's biggest sovereign wealth fund to ditch fossil fuels

Norway's Government Pension Fund Global gets go ahead to divest \$13bn of investments



▲ North Sea oil companies such as Premier and Tullow will lose investment. Photograph: Alamy

ADB declares coal exit in Asia Pacific, but gas remains in play

by Imelda Abano on 11 May 2021



Recent shift in global investment trends broaden opportunities for financing energy transitions

Key take away messages

- Broaden participation of stakeholders to democratize energy system and mobilize support rapid transition to low carbon energy
- Enable regulatory and institutional environment to incentivize citizen participation and bussiness shift to low carbon energy
- Diversify financial options, particularly small scale energy initiatives (e.g. cooperative, crowd sourcing, blended finance)



Terima Kasih!

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