Energy crisis – an opportunity for clean energy transition?

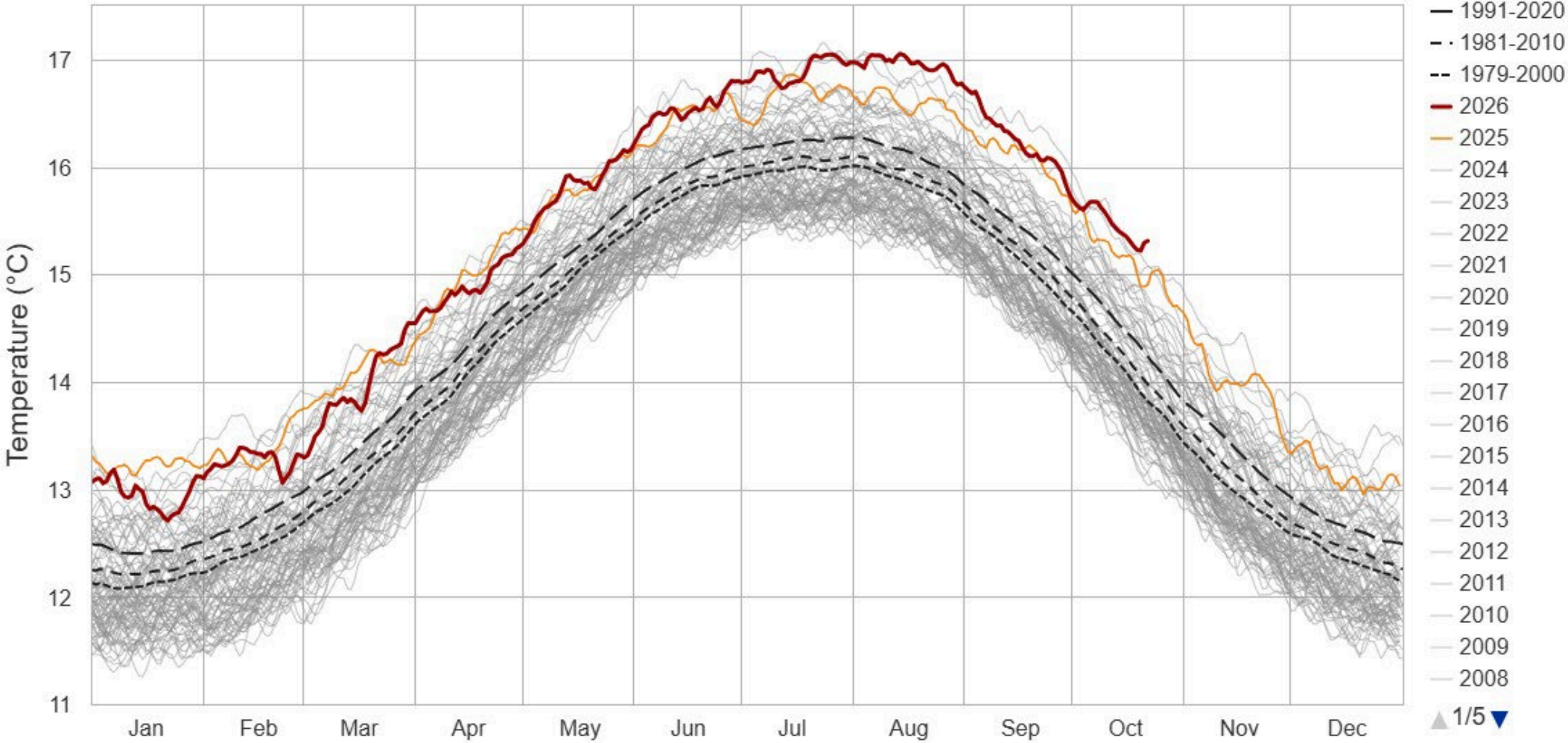
Sigrid Stagl

OeNB Talks, 29 Oct 2026



Daily Surface Air Temperature, World (90°S–90°N, 0–360°E)

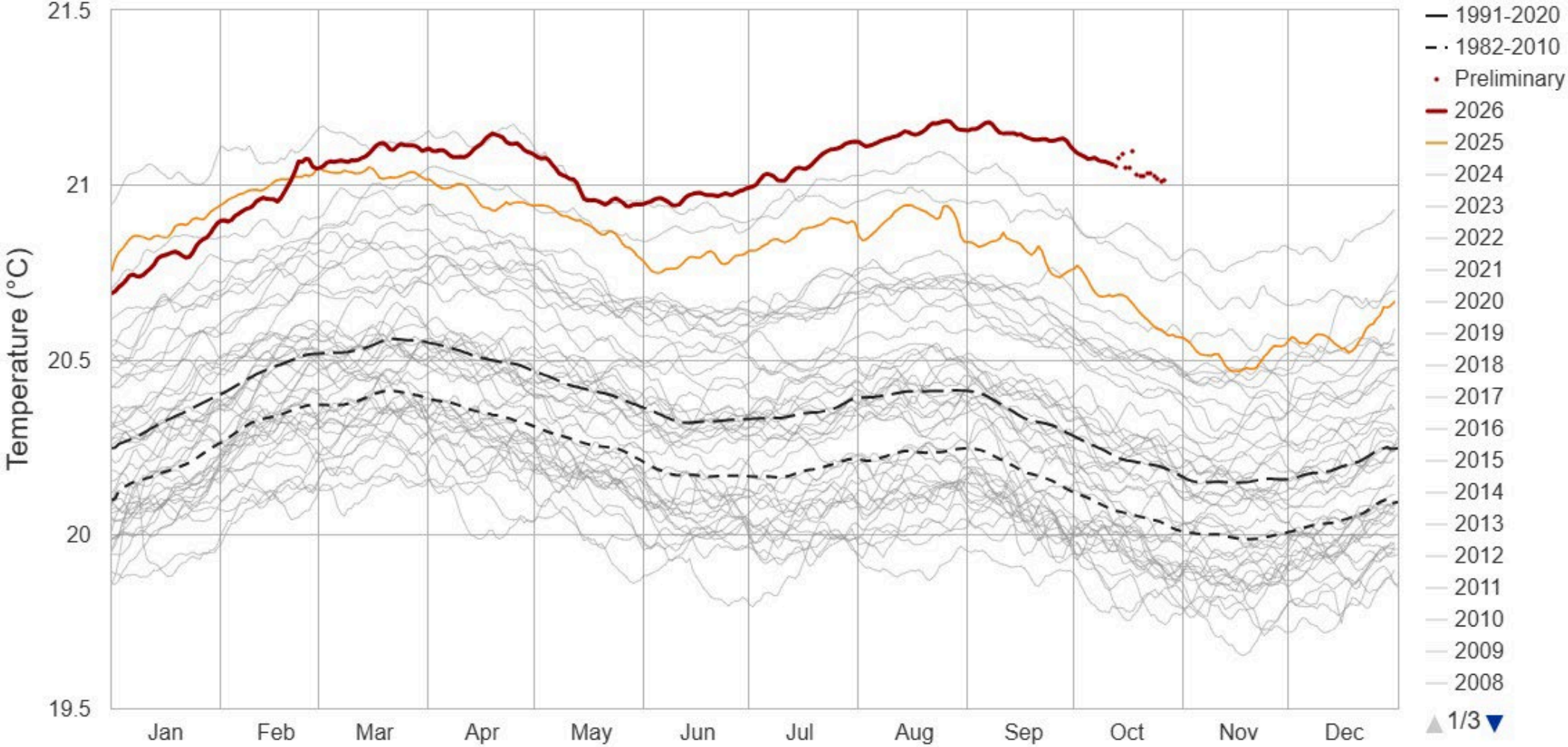
Dataset: ECMWF Reanalysis v5 (ERA5) downloaded from C3S | Image Credit: ClimateReanalyzer.org, Climate Change Institute, University of Maine



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Daily Sea Surface Temperature, World (60°S–60°N, 0–360°E)

Dataset: NOAA OISST V2.1 | Image Credit: ClimateReanalyzer.org, Climate Change Institute, University of Maine



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Three questions

1. **Why does the crisis still hurt – despite the renewable boom?**

   Because we add clean energy, but keep fossil dependence

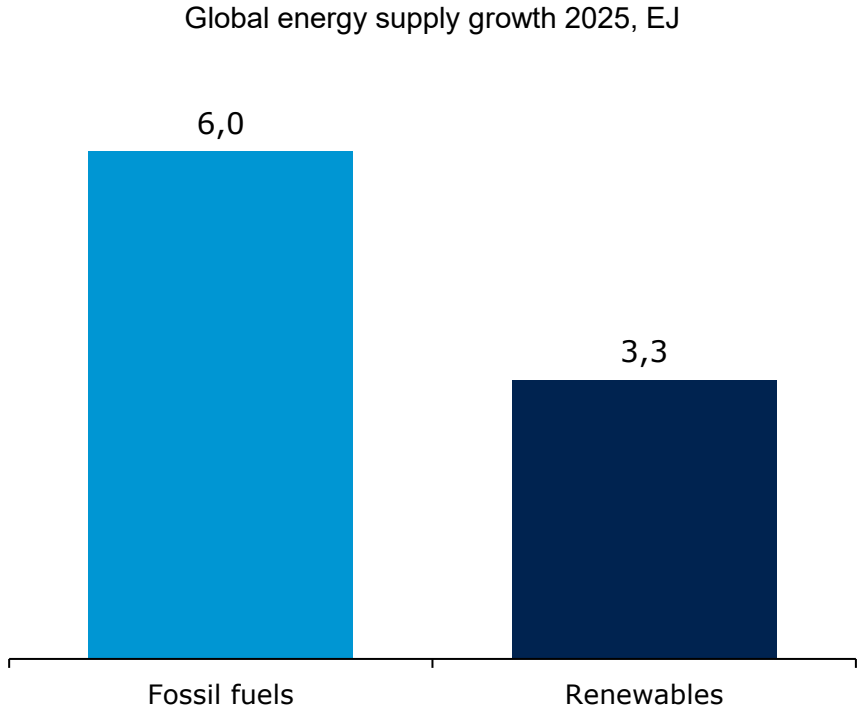
2. **Where is the opportunity?**

   Electrify end uses and reduce demand, the efficiency dividend

3. **What decides whether we seize it?**

   Crisis responses and monetary policy, neither is climate-neutral

1 | Globally:
renewables cover growth, fossil fuels stay



- Low-carbon sources met all growth in power demand
- But fossil supply grew almost twice as much overall
- Fossil share ~86% of primary energy
- Coal retirements H1 2026: lowest since 2015

→ **Energy addition, not yet substitution**

Sources: Energy Institute, Statistical Review of World Energy 2026; FT report 'The future energy mix' (15.10.2026)

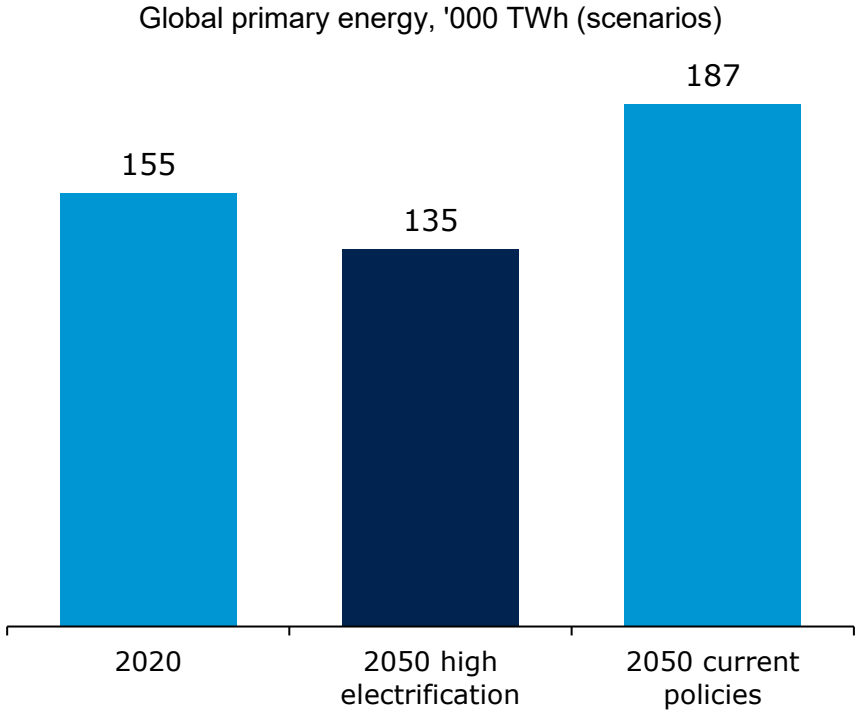
1 | Europe:
the dependence sits outside the power sector

- Electrification rate ~23% – flat for a decade
  - China, Japan, Korea: above 30%
- Heating, transport, industry still largely fossil
- Gas and coal still set EU power prices ~58% of the time
- Fossil import bill: +€22bn in the first weeks of the war

→ **Clean power alone does not protect prices**

Sources: IEA/European Commission (16.4.2026); BloombergNEF (FT, 15.10.2026)

2 | Electrification pays twice: efficiency and security



- EVs: ~1/3 of the energy per km; heat pumps: 3–4× heat per kWh
- 2050: ~28% less primary energy – with more energy services
- China: EVs already displace ~1 mb/d of oil
- High electrification: lowest cost and lowest emissions

→ **EU targets 32% (2030), 46% (2040) – price power to match**

Sources: Aghahosseini et al. (2026), IET Renew. Power Gen.; IEA/EU Commission (FT, 11.7.2026); Kemp (FT, 17.8.2026)

2 | Demand is the fastest lever – if the price signal can work

- 2022: EU cut gas use by ~20% within a year
- Austria 2022/23: −2.6 Mt CO_2e/yr in national sectors
  - near the 2.75 Mt/yr the Klimagesetz (climate law) requires from 2027
- Efficiency and sufficiency act in months, not years
- Flexible demand can use the ~10% of wind and solar curtailed

→ **Every kWh not needed is immune to price shocks**

Sources: European Commission (FT, 11.7.2026); BloombergNEF (FT, 15.10.2026)

2 | …unless new demand eats the dividend: data centres

- 2025: 788 TWh globally, +20% in one year
- USA: up to 12% of power demand by 2028
- Austria: first hyperscale data centre in Kronstorf
  - Possible full build-out (500 MW): ~4.4 TWh/yr > Vienna's households
- Competes for clean power, grids and flexibility

→ **Efficiency standards, waste-heat use, siting rules**

Sources: Energy Institute (FT, 7.7.2026)

3 | Crisis responses: locking in or building exit options?

Locking in – Austria 2026

- Spritpreisbremse (fuel price cap), round 2: ~12 ct/l for all, diesel tax at EU minimum
- Firms staying fossil: 'the government will help us again'
- Flugabgabe (air travel tax) (€180m/yr) under pressure to be halved or scrapped
- Climate-counterproductive subsidies: €4–5.7bn/yr, ~60% transport, WIFO (2022)

Building exit options

- Renovation, heat pumps, electric fleets
- Public transport and active mobility
- Tax electricity below fossil fuels
- Switching support for low incomes
- Austrian strength: heat-pump export share up to 69%

3 | Monetary policy is not climate-neutral either

- Disorderly transition: energy inflation ~13.5% p.a.
  - Orderly transition: ~3.5% p.a. – delay is inflationary
- 4-point rate rise: renewables up to +30%, gas ~+7%
- Market-neutral bond purchases carried a carbon bias
- 2022 tilt: −30% carbon footprint, reinvestments only

→ **Fight fossilflation without penalising the transition**

Sources: Drudi et al. (2021), ECB OP 271; IEA (2020); Cuomo (2025); Dafermos (2026)

3 | The ECB mandate: not whether, but on which basis

Price stability

- Climate affects inflation: ECB must consider it
- Same frame has justified rate hikes
- Widens exclusive central bank discretion

Supporting EU policies

- Art. 127(1) TFEU with Art. 3(3) TEU, Art. 11 TFEU
- Tied to priorities set by legislators
- Only as strong as climate legislation

Sources: Zilioli & Ioannidis (2022); Ioannidis (2026); Cuomo (2025); DiLeo et al. (2025); Eickmeier & Petersen (2026)

Yes, an opportunity – but not a guarantee

1. **It hurts because clean energy was added, not substituted**
   - Europe's dependence sits in heat, transport, industry
2. **Electrify end uses and cut demand: the dividend is large**
   - Steer new demand such as data centres
3. **Policy decides: exit options, not price brakes**
   - Monetary policy and climate law pull in the same direction

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