



Shaping the Energy Future in the CAREC Region:

-Sustainability through enhanced Interconnectivity and Renewable Adoption

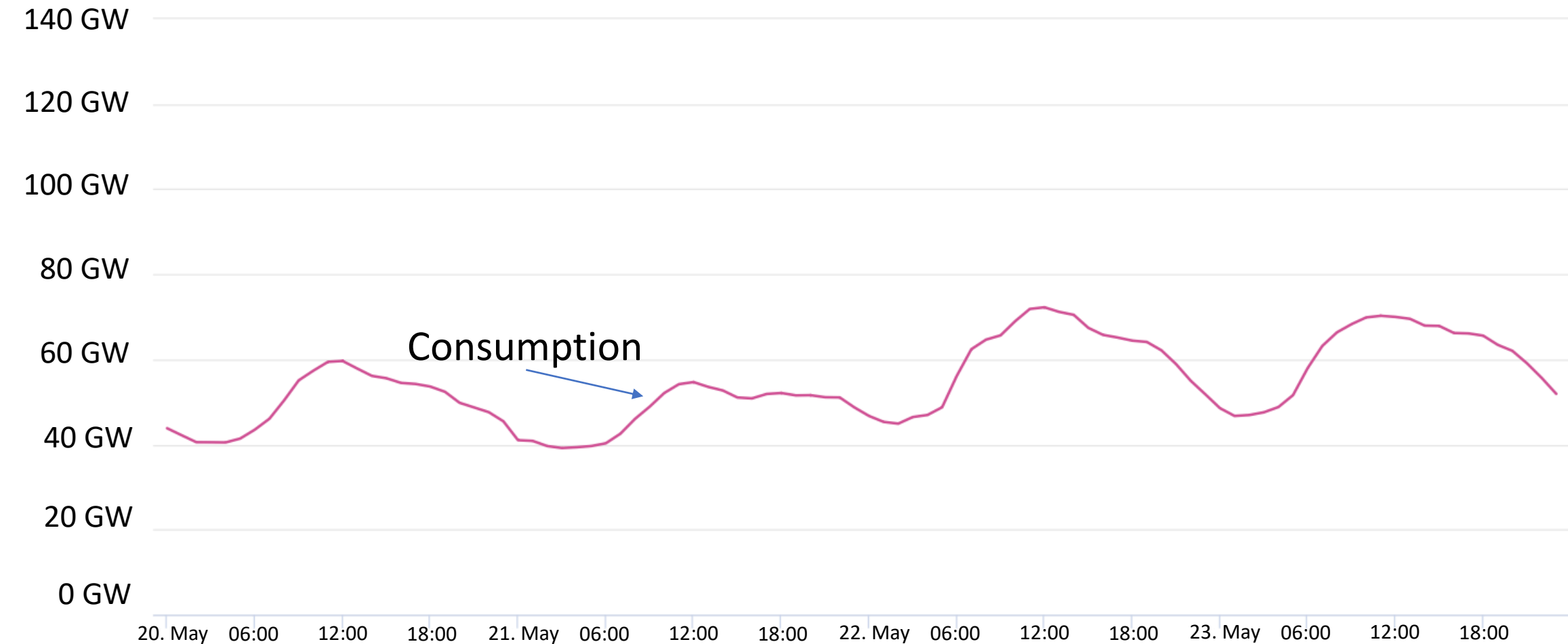
CAREC Senior Officials Meeting, Tbilisi, Georgia– June 13-14 2023

Presentation by Martin Sommerseth Jaer, Finance Specialist (Energy), ADB

mjaer@adb.org

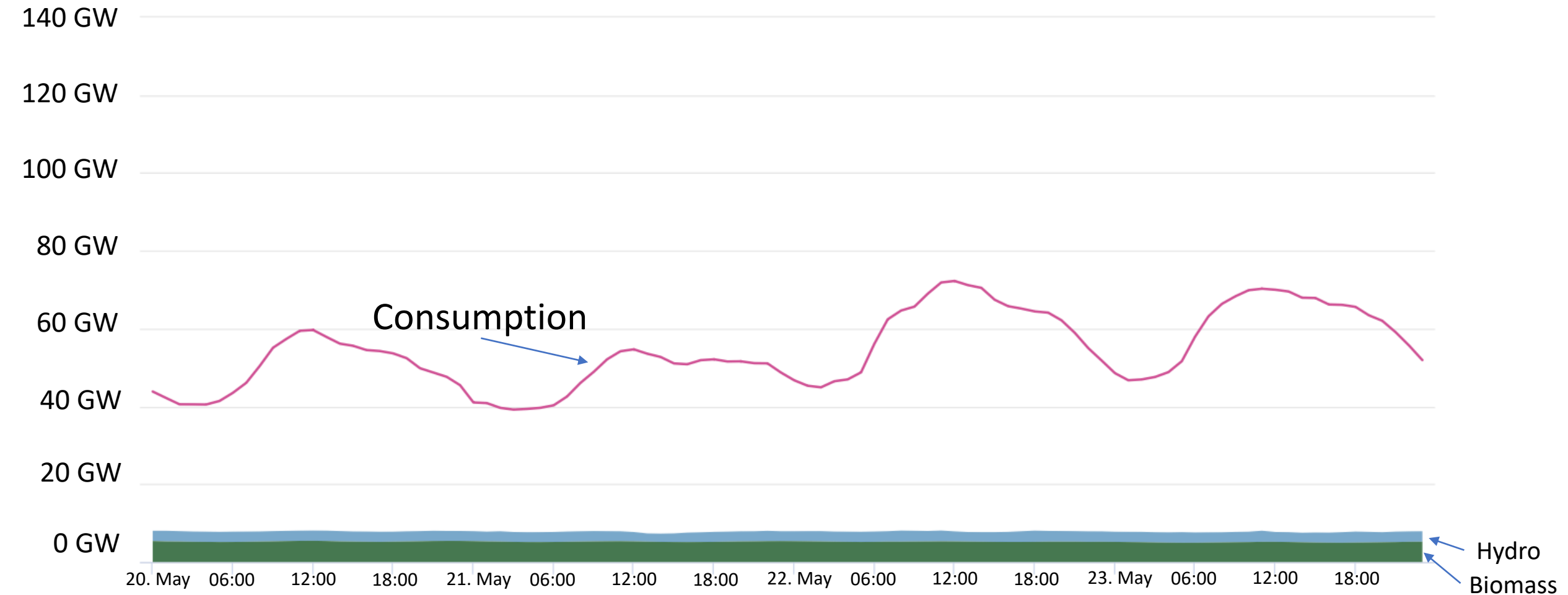
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



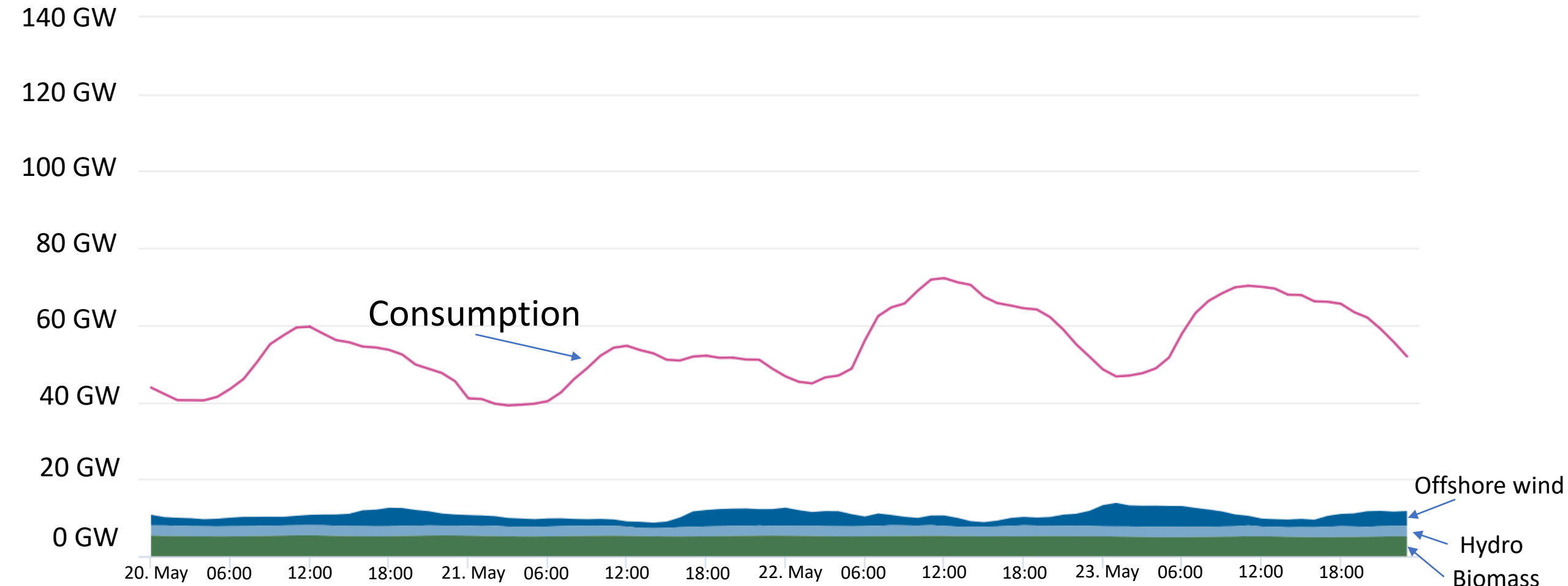
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



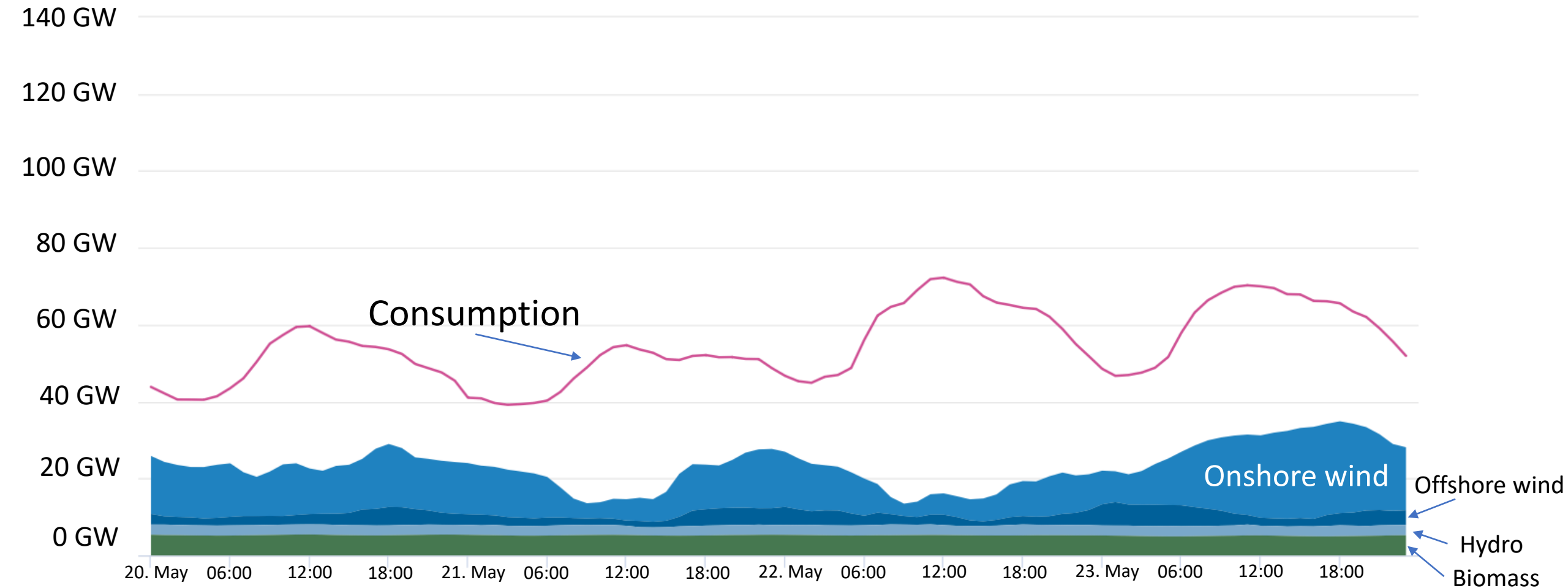
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



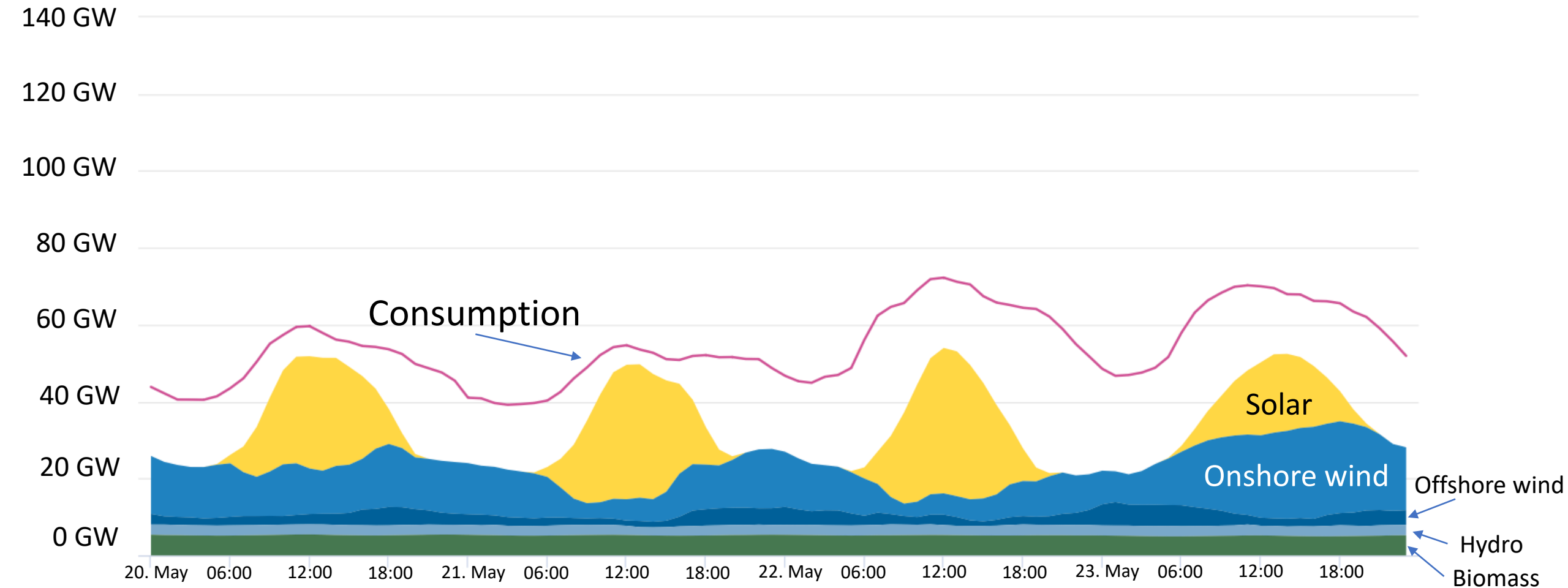
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



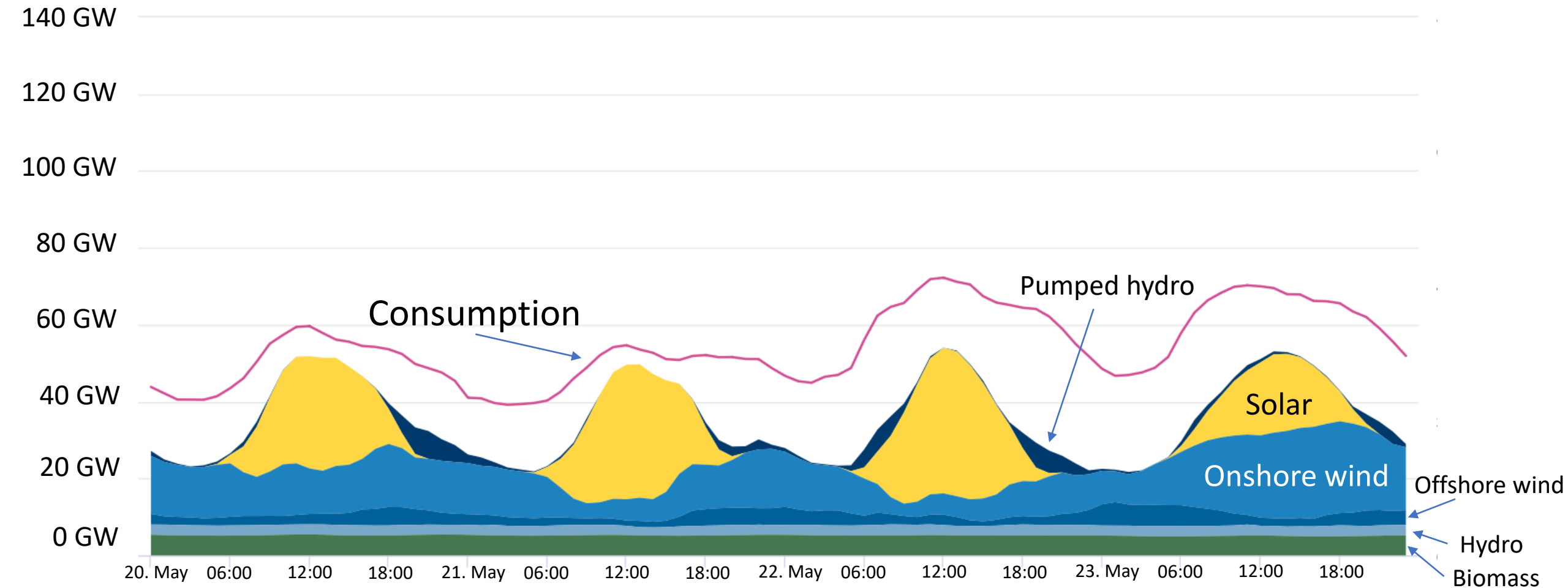
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



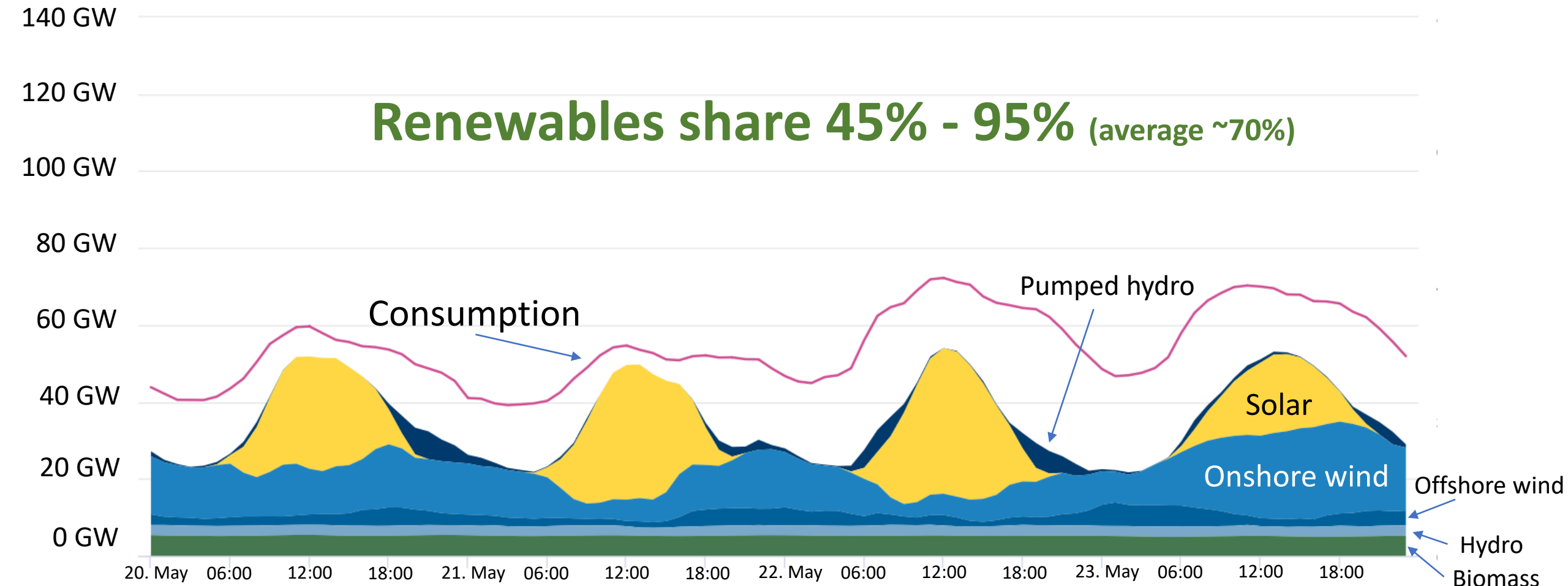
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



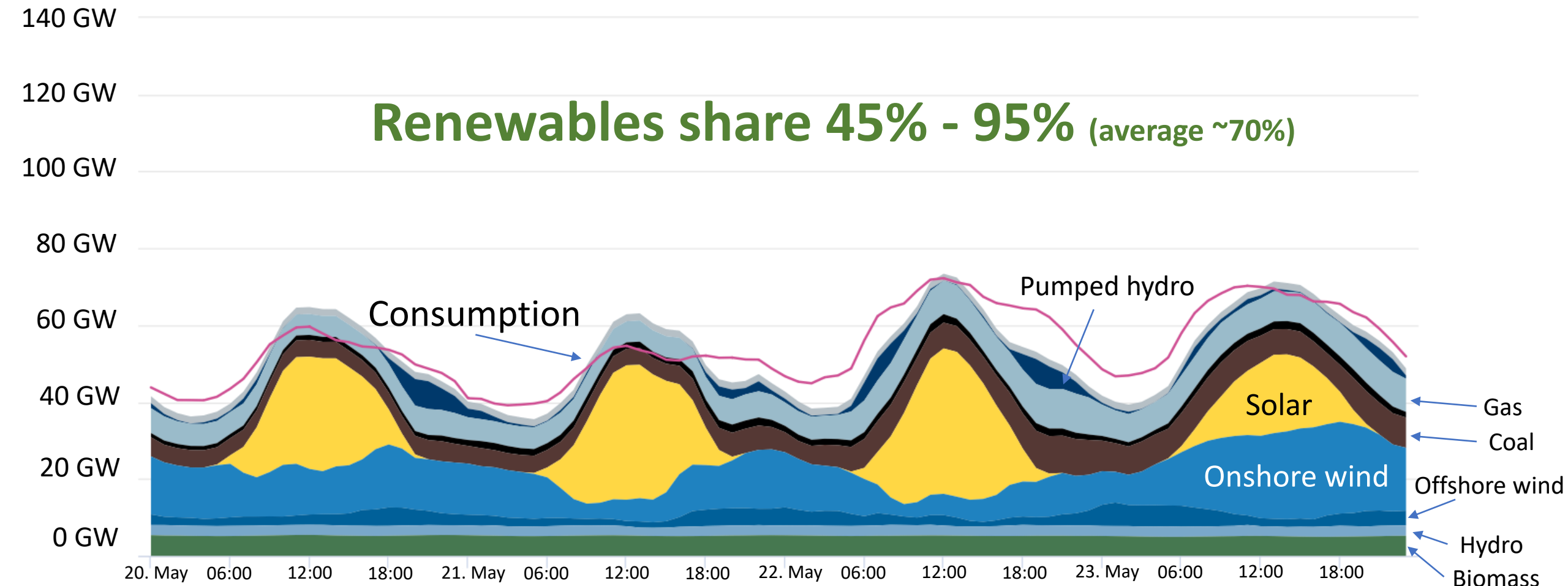
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



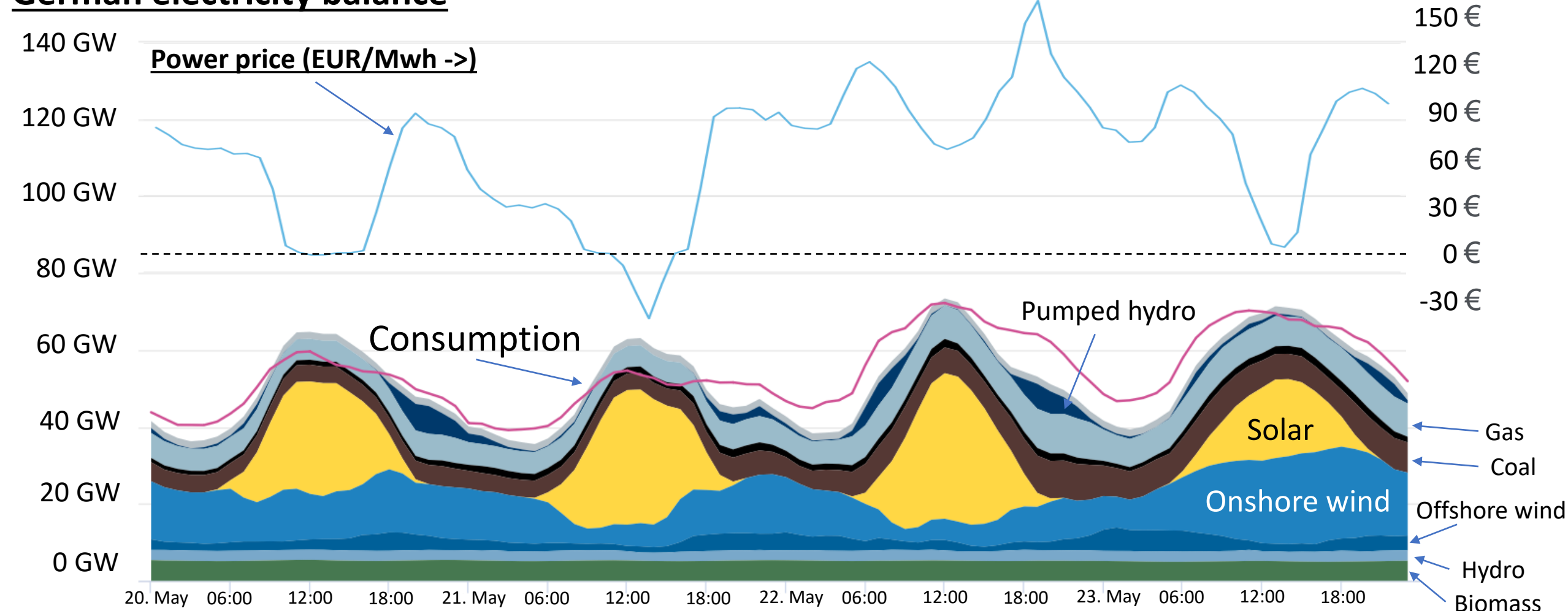
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



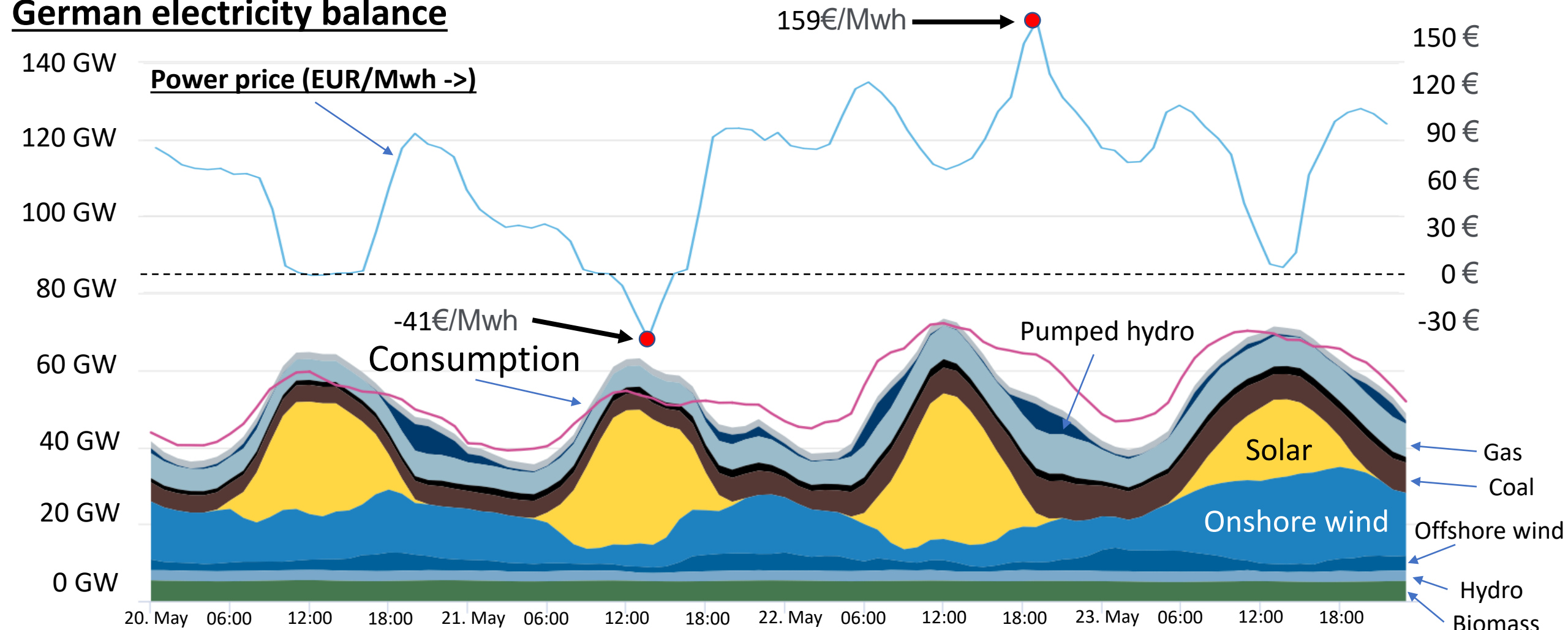
Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance

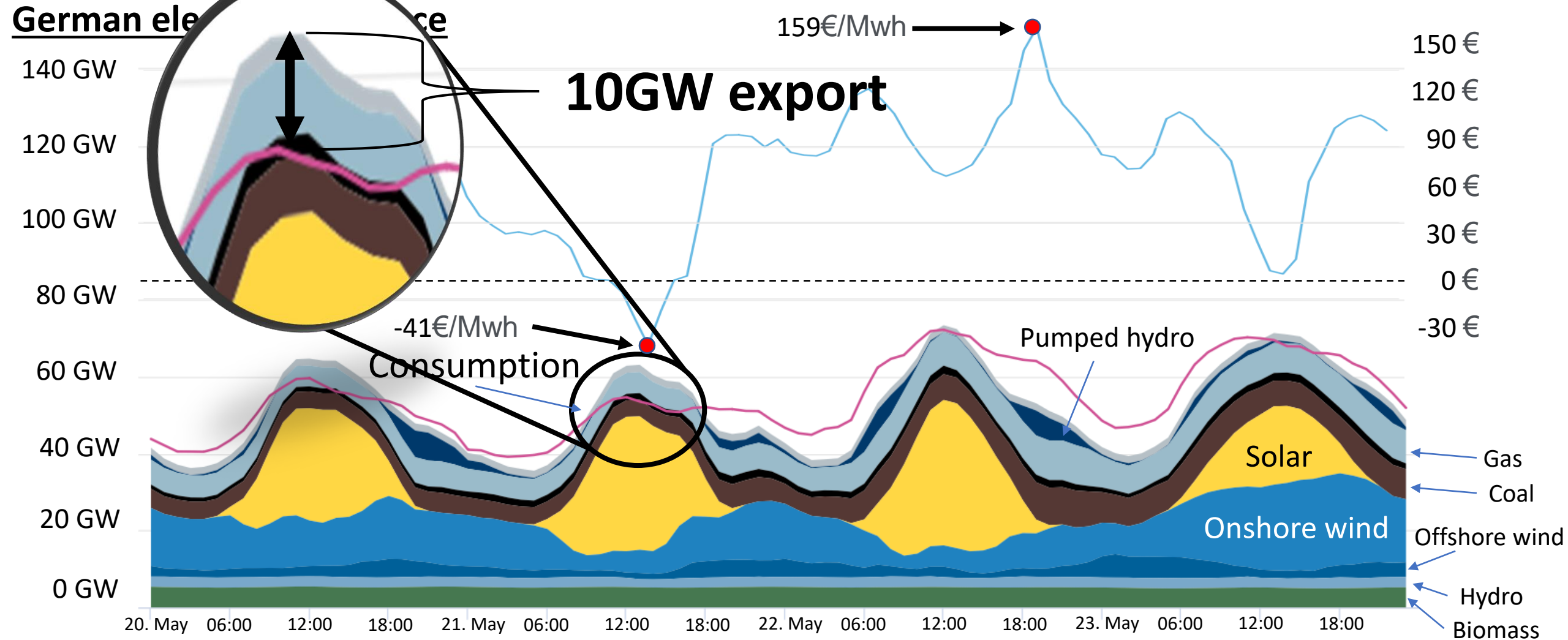


Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance

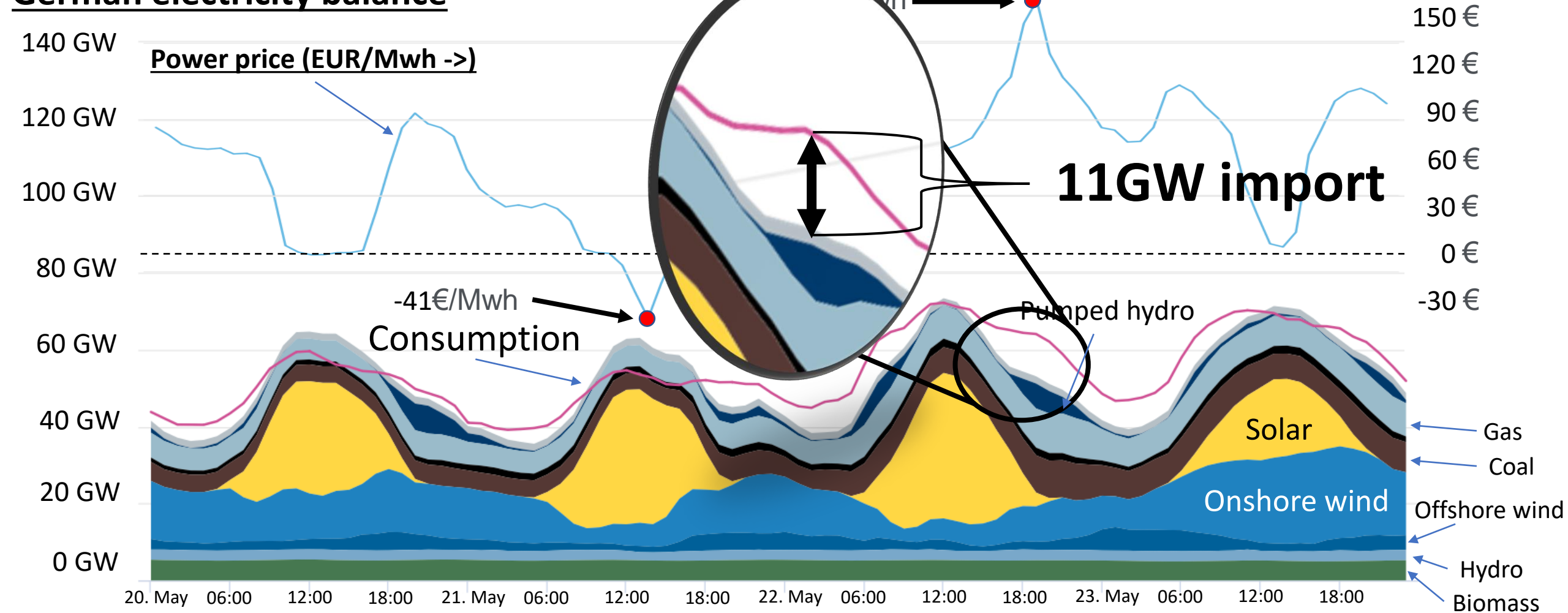


Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance



Insights from Europe: A Four-Day Snapshot of Germany's Electricity Balance

German electricity balance



Why discuss these Insights from Europe: Linking lessons to the CAREC Region

Inspirational lessons:

- Data Availability and Transparency
- Market-determined Pricing
- Grid Integration and regional Interconnectivity
- High renewable energy share

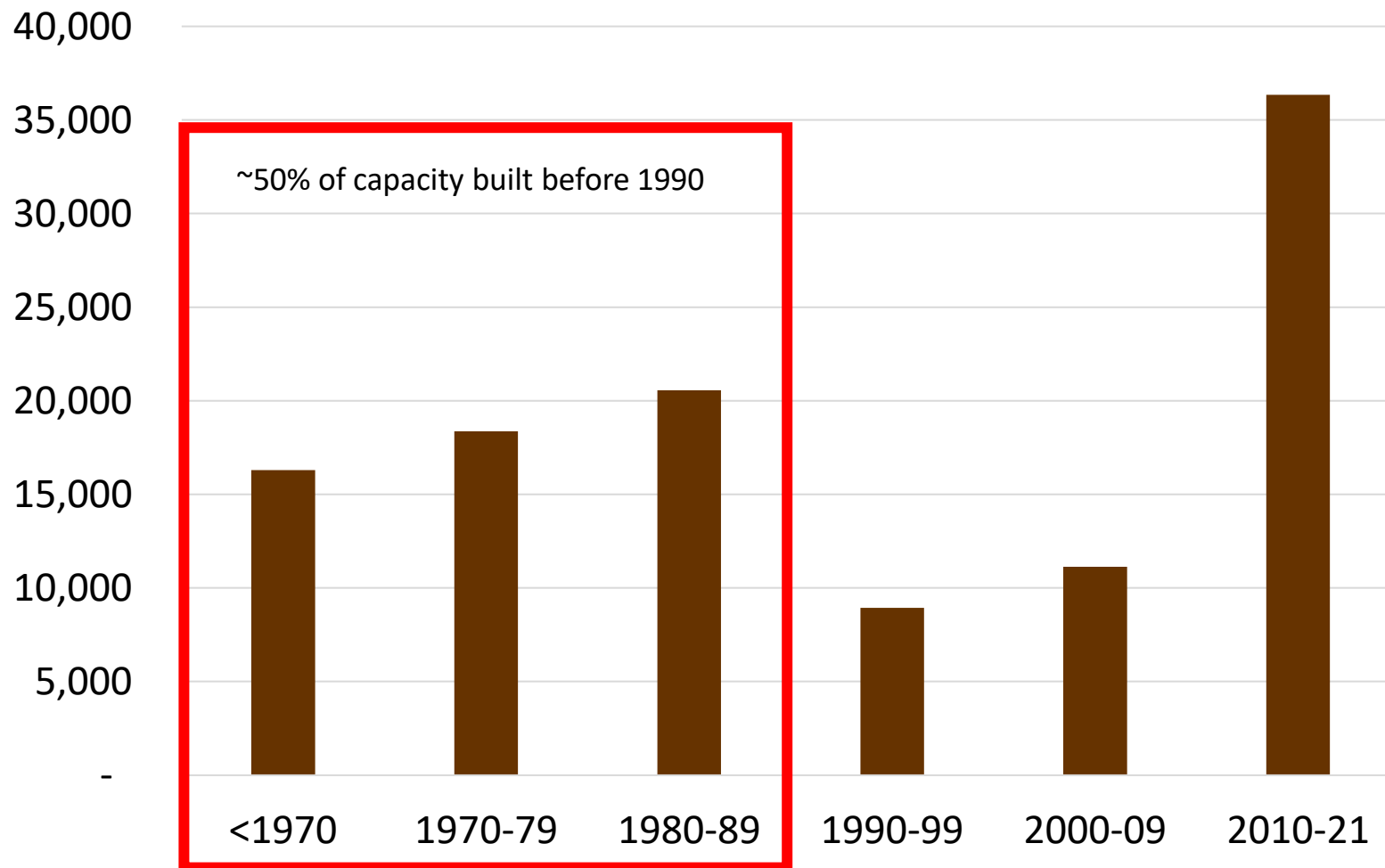
Cautionary tale:

- Energy price volatility
- Variability and need for expensive peaking and balancing power
- Grid stability and security

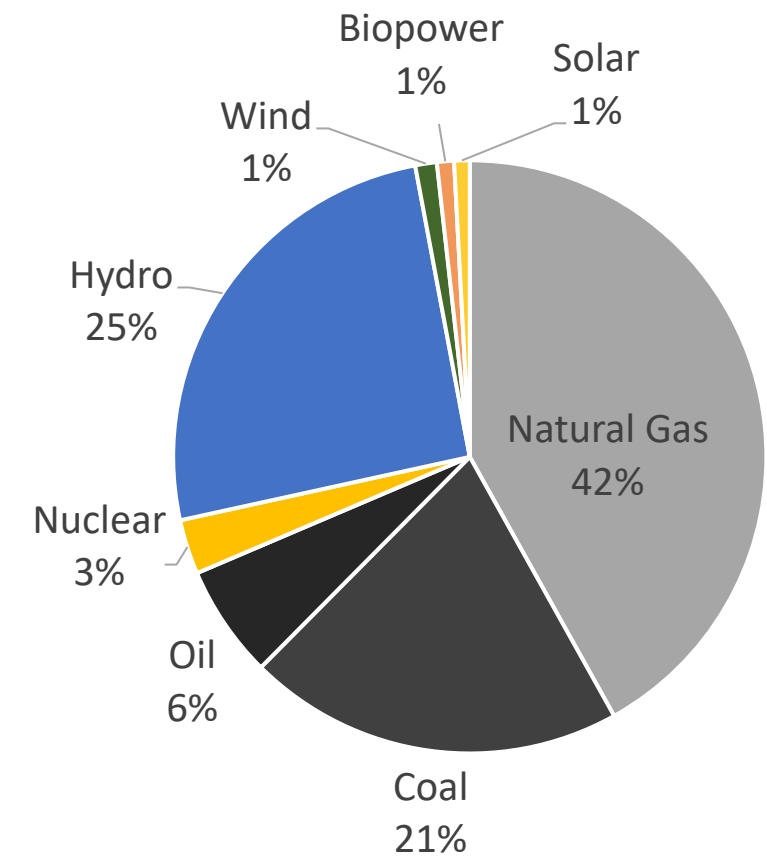
Power sector in the CAREC Context (Ex PRC):

Vintage technology and aging infrastructure. High fossil fuel dependency.

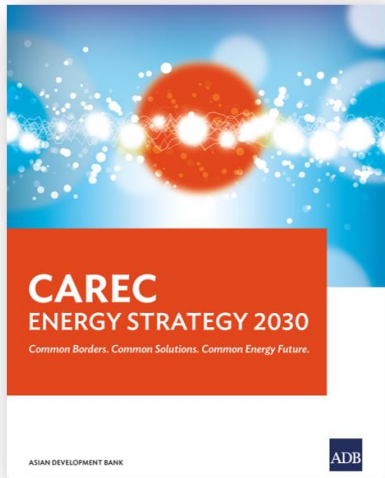
Installed generating capacity, by year built (MW)



Electricity generation by source



CAREC Energy Strategy 2030: Interconnectivity, scaled up investments, sustainability



Key Strategic priorities:

1. Better energy security through regional interconnections
2. Scaled up investments through market-oriented reforms
3. Enhancing sustainability by greening the regional energy system

- ***Utilizing the CAREC Region's diverse and abundant energy resources, the power sector in the region can become more sustainable and reliable.***
- ***Large scale hydro power projects can be the region's "batteries"; balancing large scale deployment of wind and solar power.***
- ***However: this requires improved regional interconnections and more transparent and market-based electricity trading arrangements.***



CAREC ESCC Work program 2023-25: Action based work program next 12 months

- Action- and meeting based work program
-> leveraging on previously delivered knowledge products, coordinated with other development partners.
- Aligned with the CAREC Energy strategy:
Uniting stakeholders in the region to coordinate and improve regional cooperation in the energy sector

Activity	Timing
Energy Investment Forum	November 28-29, 2023
Transmission and grid infrastructure workshop	TBD
Energy Efficiency workshop	TBD
Study tour to the Nordic Region	June 2024



Thank you