

EPIAS

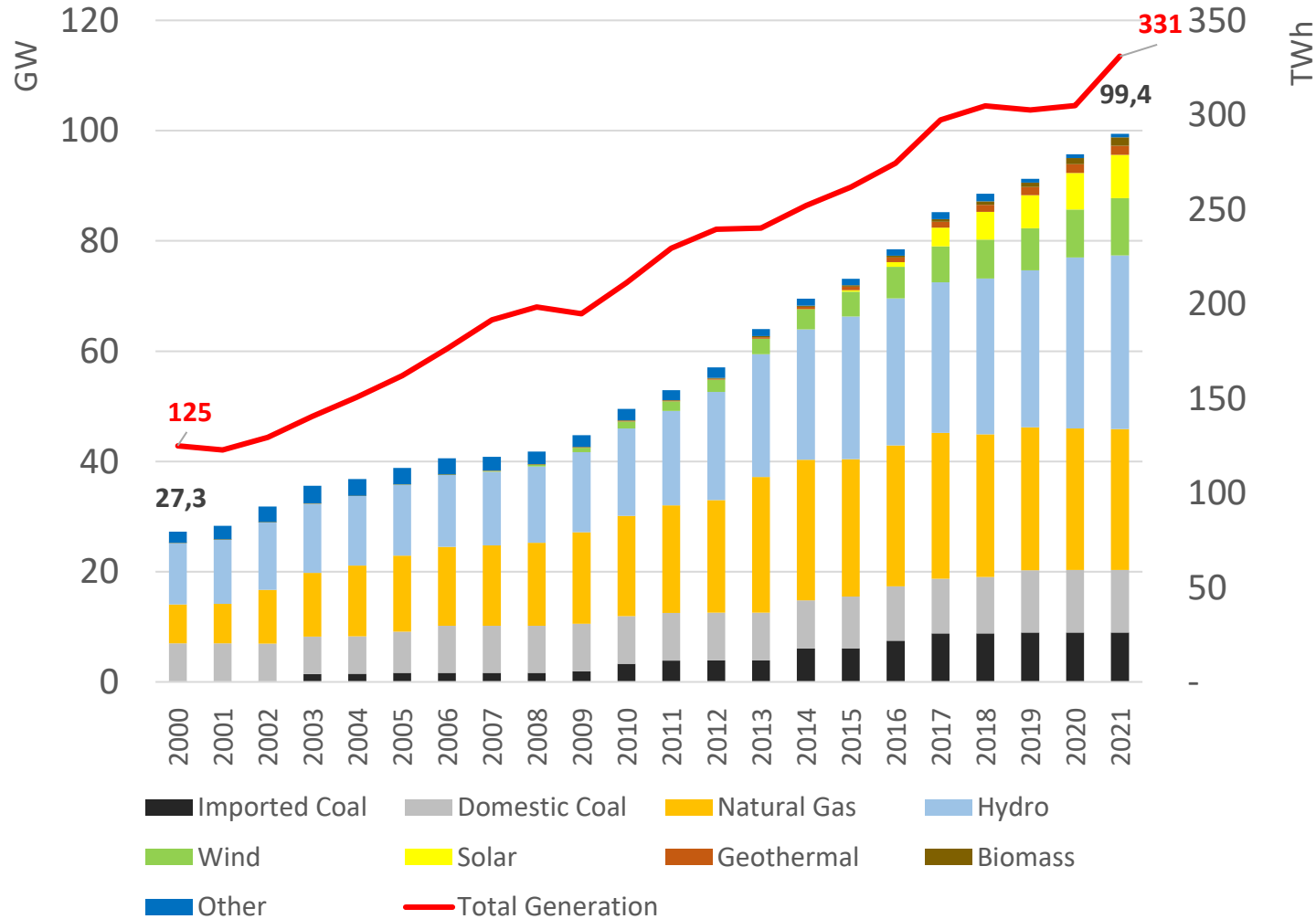
2021 Energy Crisis: The Turkish Chapter



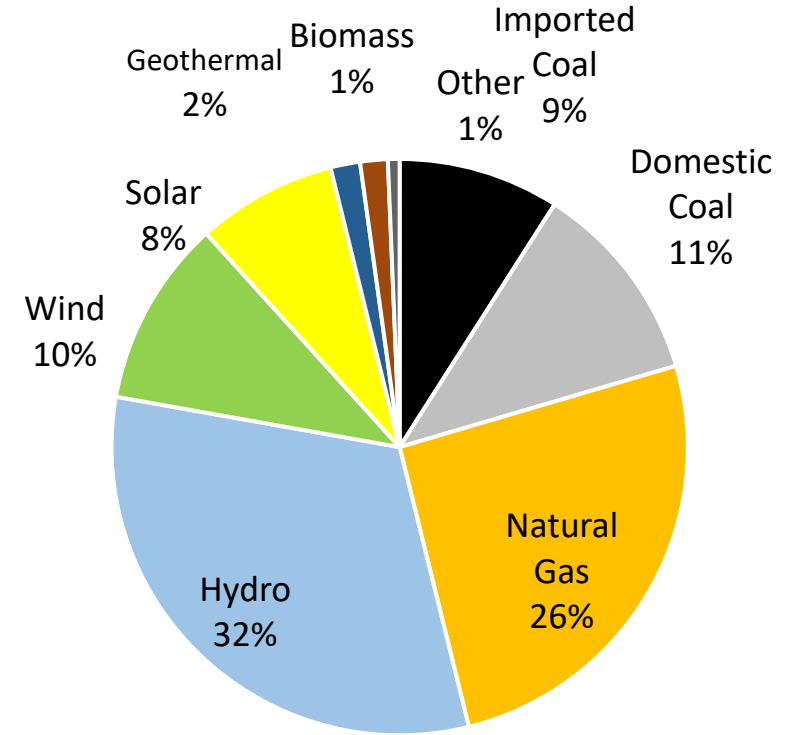
Dr.Tamer Emre

Director of Market Operations

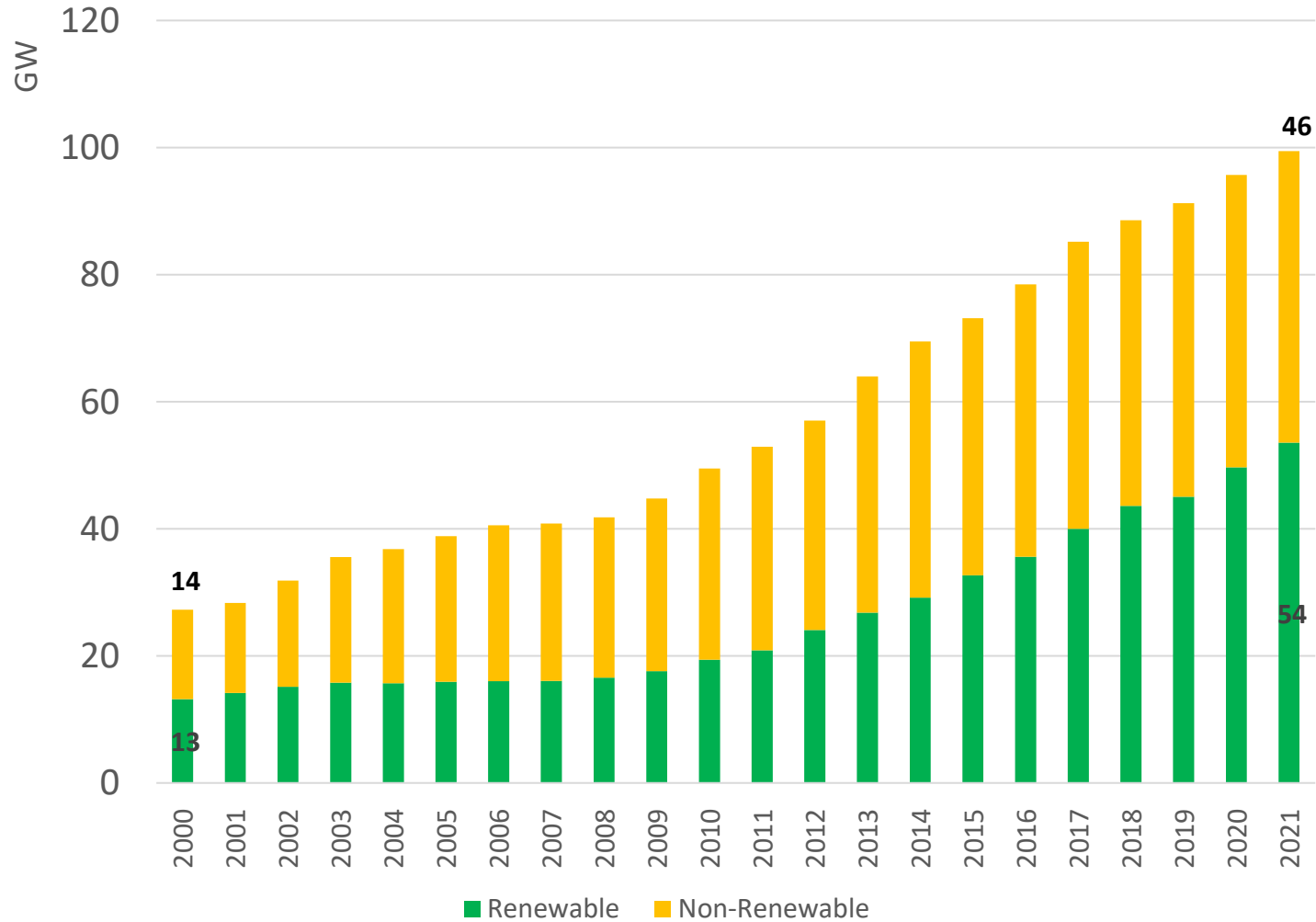
Installed Capacity & Generation



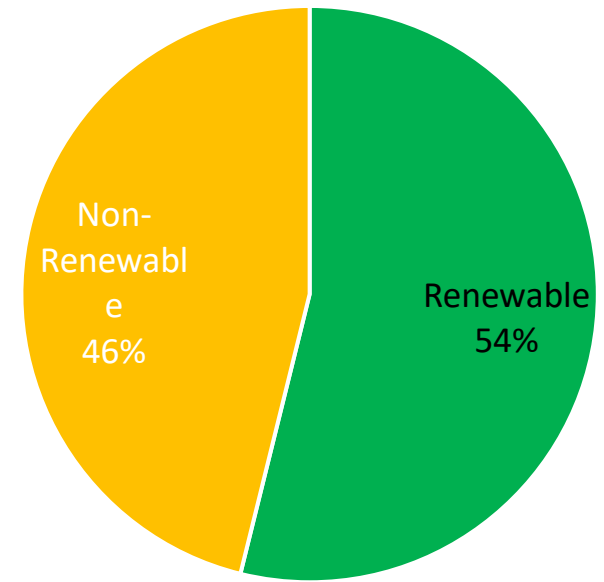
2021* Installed Capacity



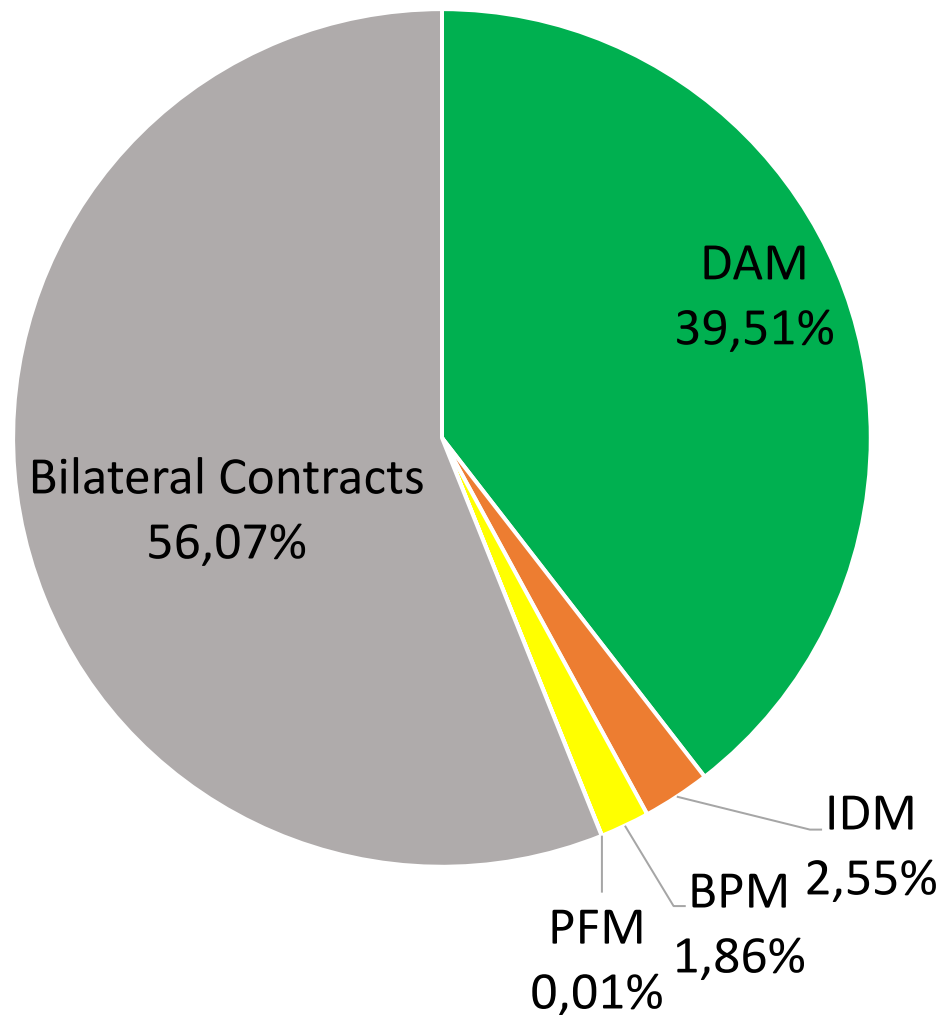
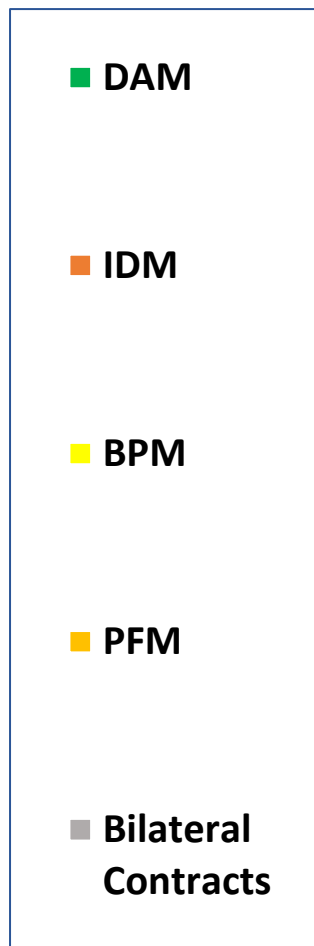
Renewable & Non-Renewable Installed Capacity



2021 Renewable & Non-Renewable Installed Capacity

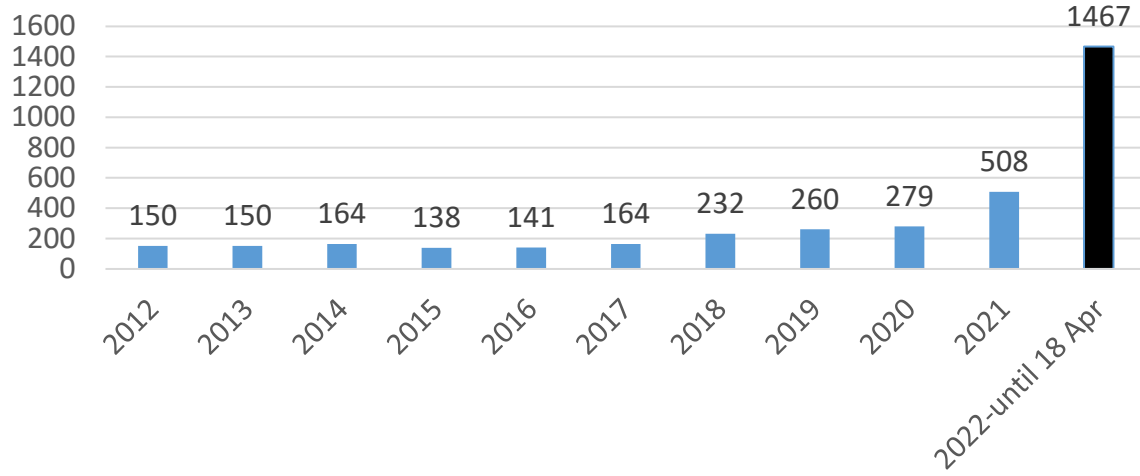


Power Market 2021 Annual Market Shares

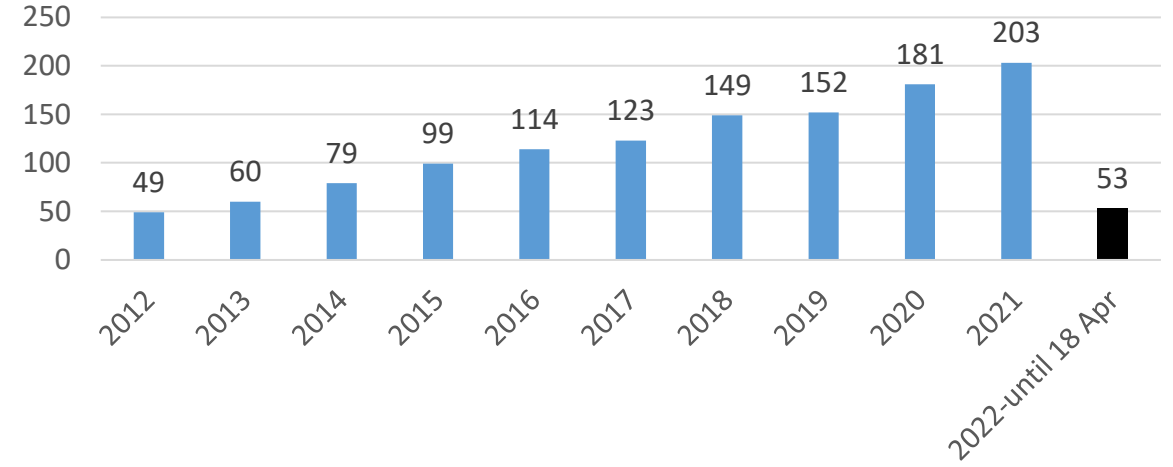


Power Market – DAM in Numbers

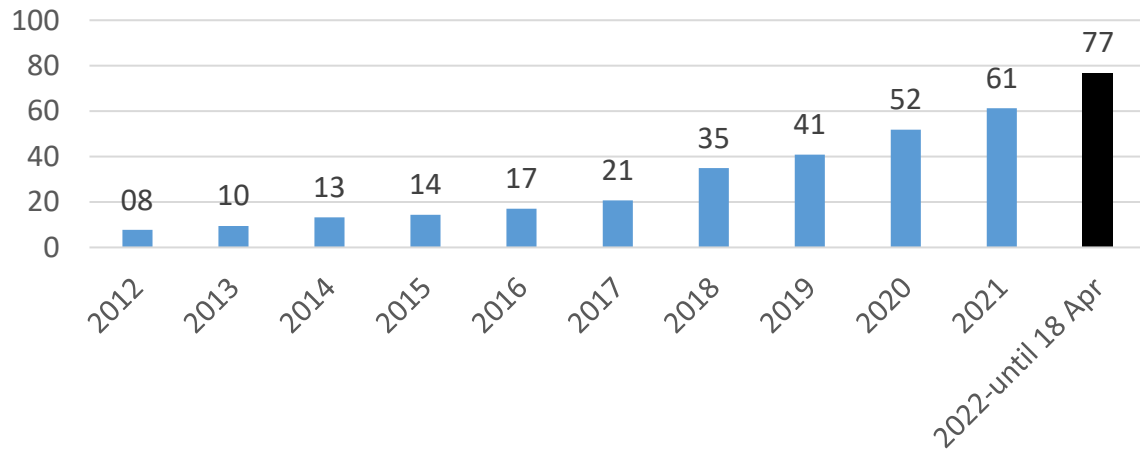
Reference Price MCP (TL/MWh)



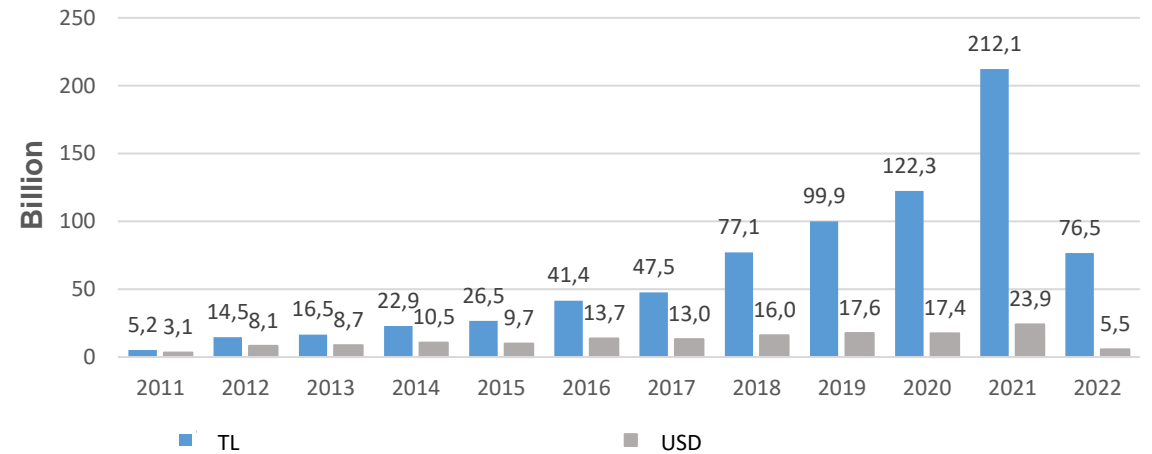
DAM Matched Volume(TWh)



DAM Commercial Volume (Billion TL)

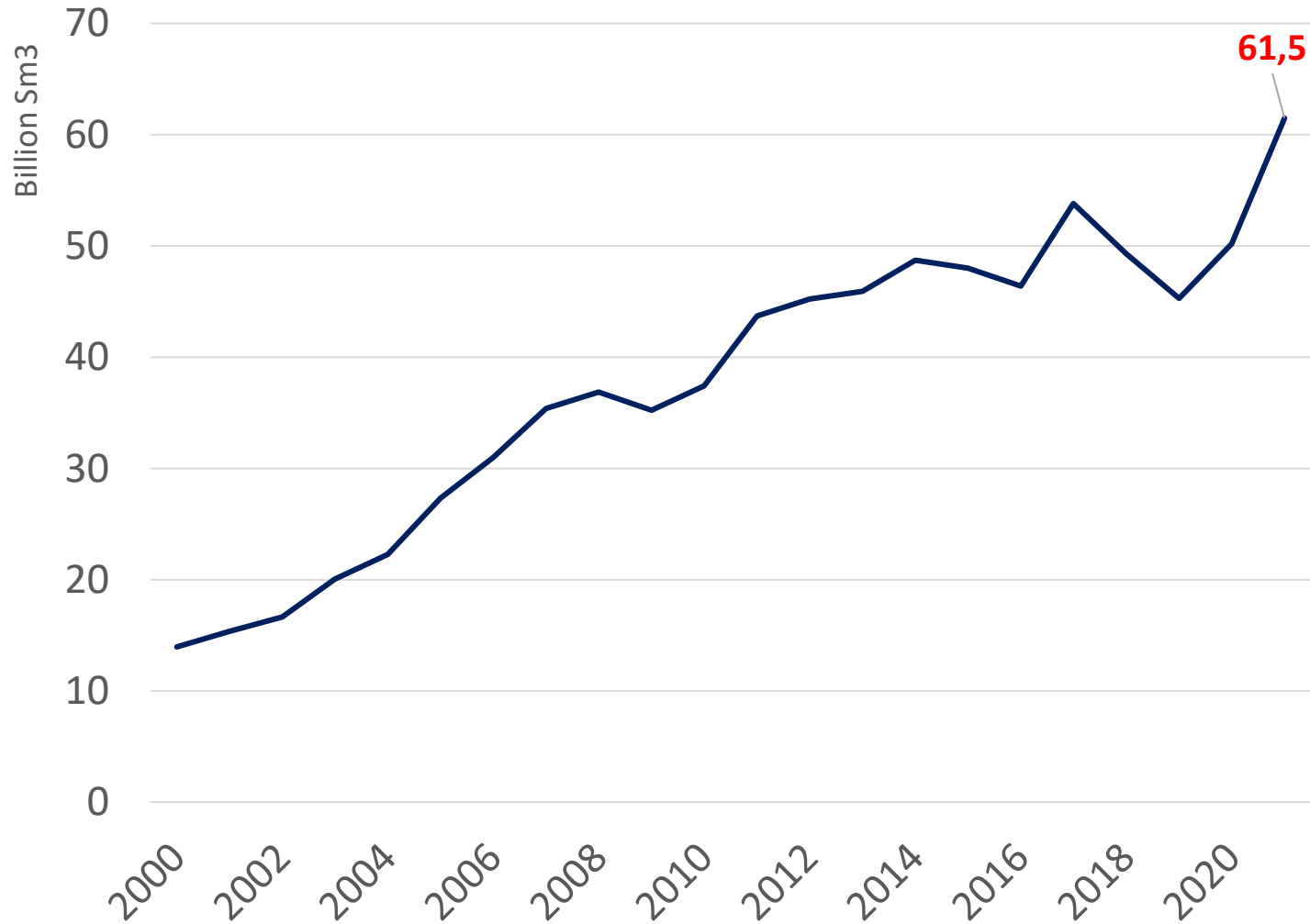


Total Billed Amount (VAT Included)

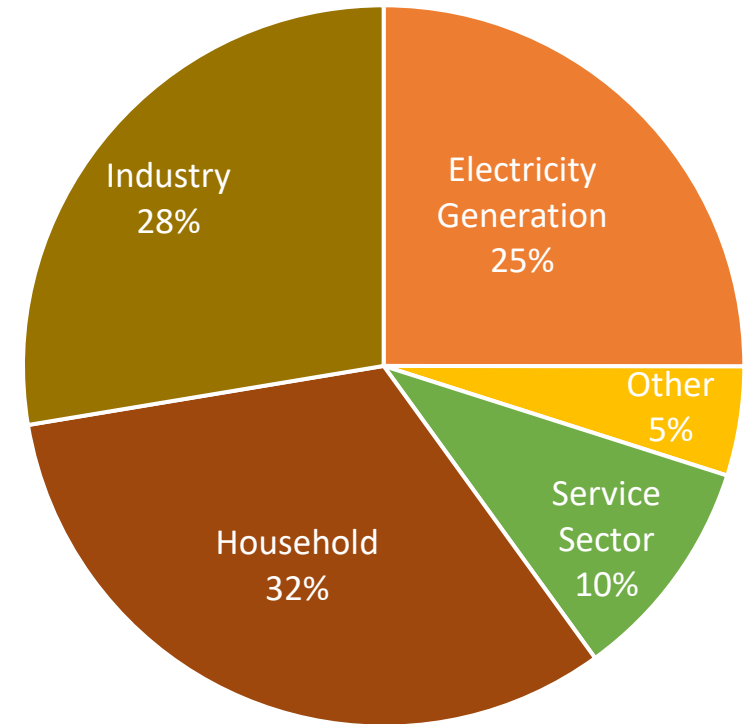


Gas Market – 2021 Figures – Consumption

Natural Gas Consumption



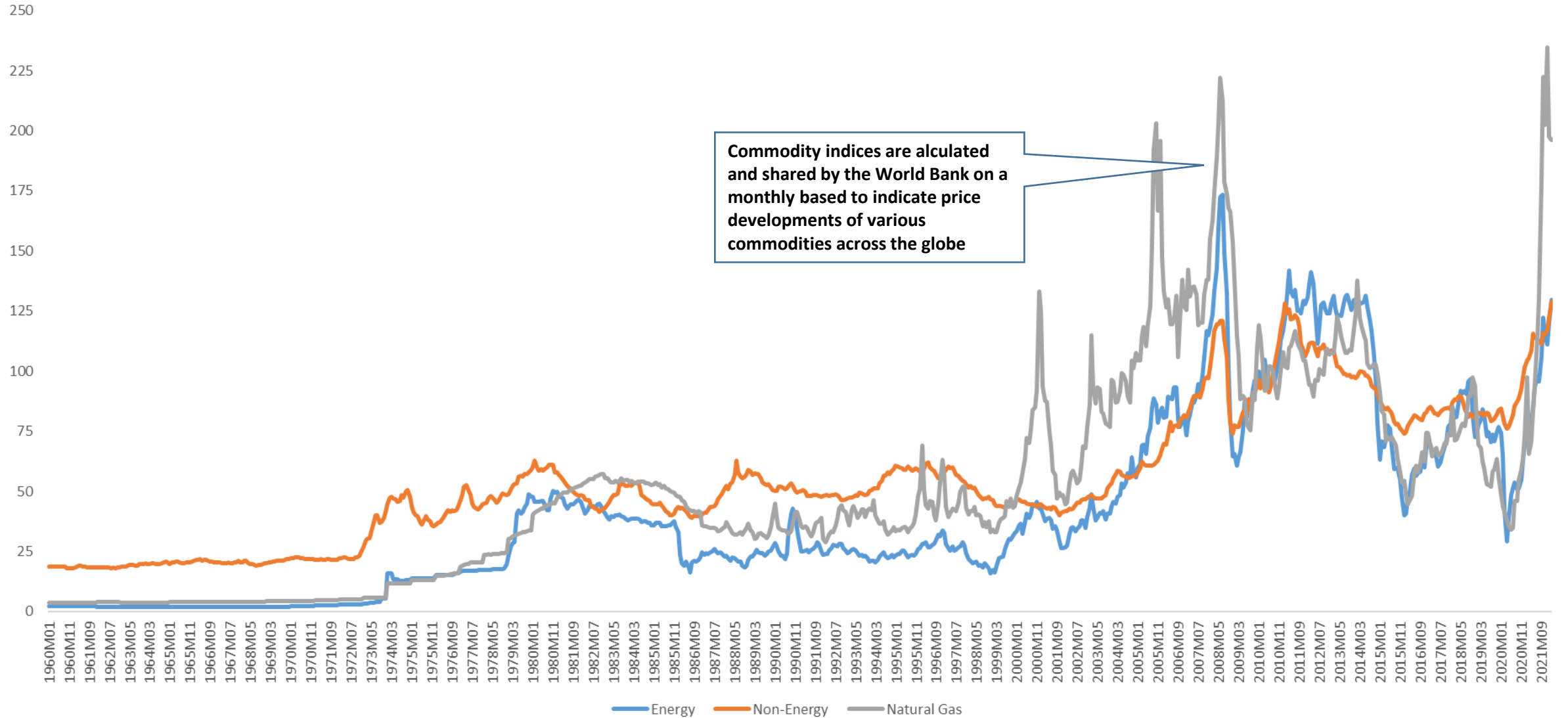
Consumed Gas by Sector – 2020



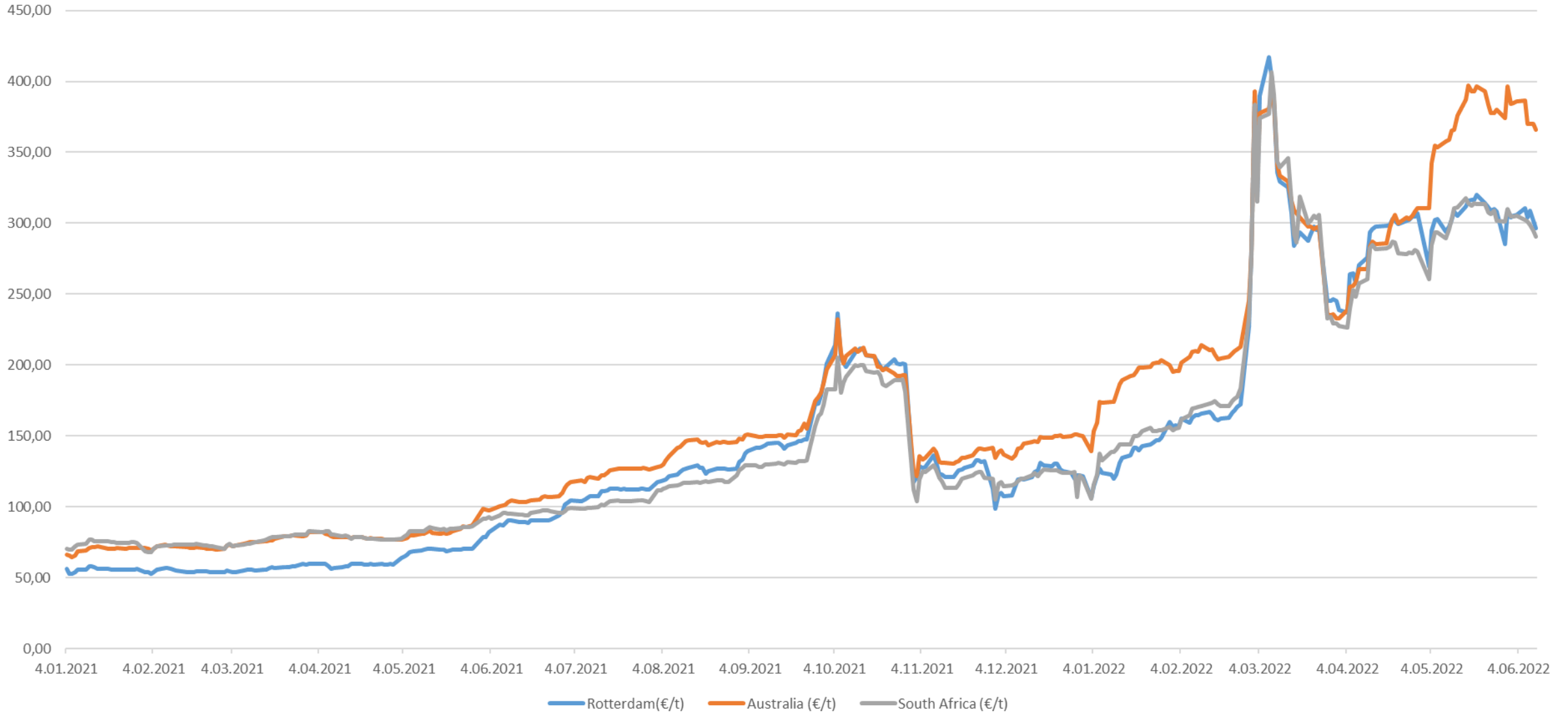


- Bulgaria
- Russia x 2
- Azerbaijan x 3
- Iran

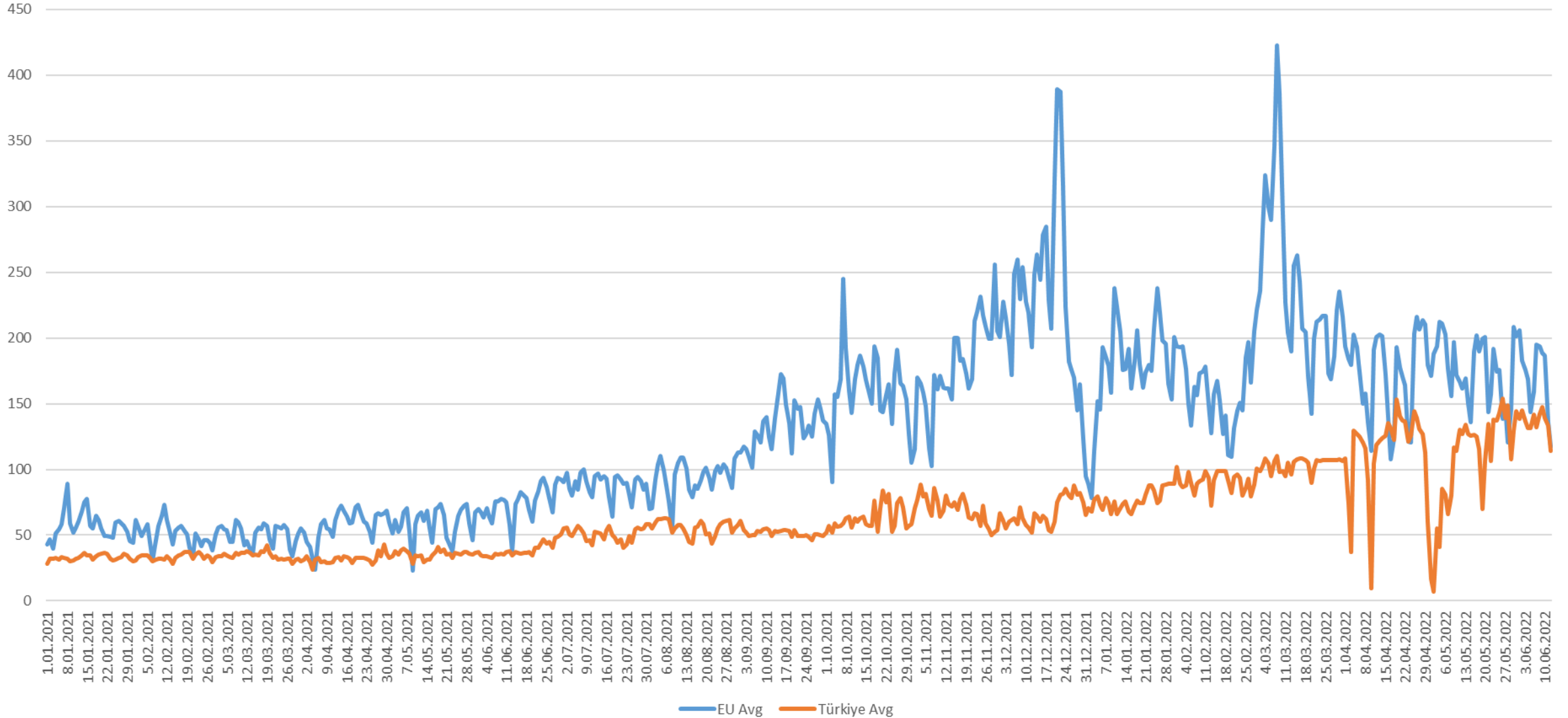
The World Bank Energy – Non-Energy Indices



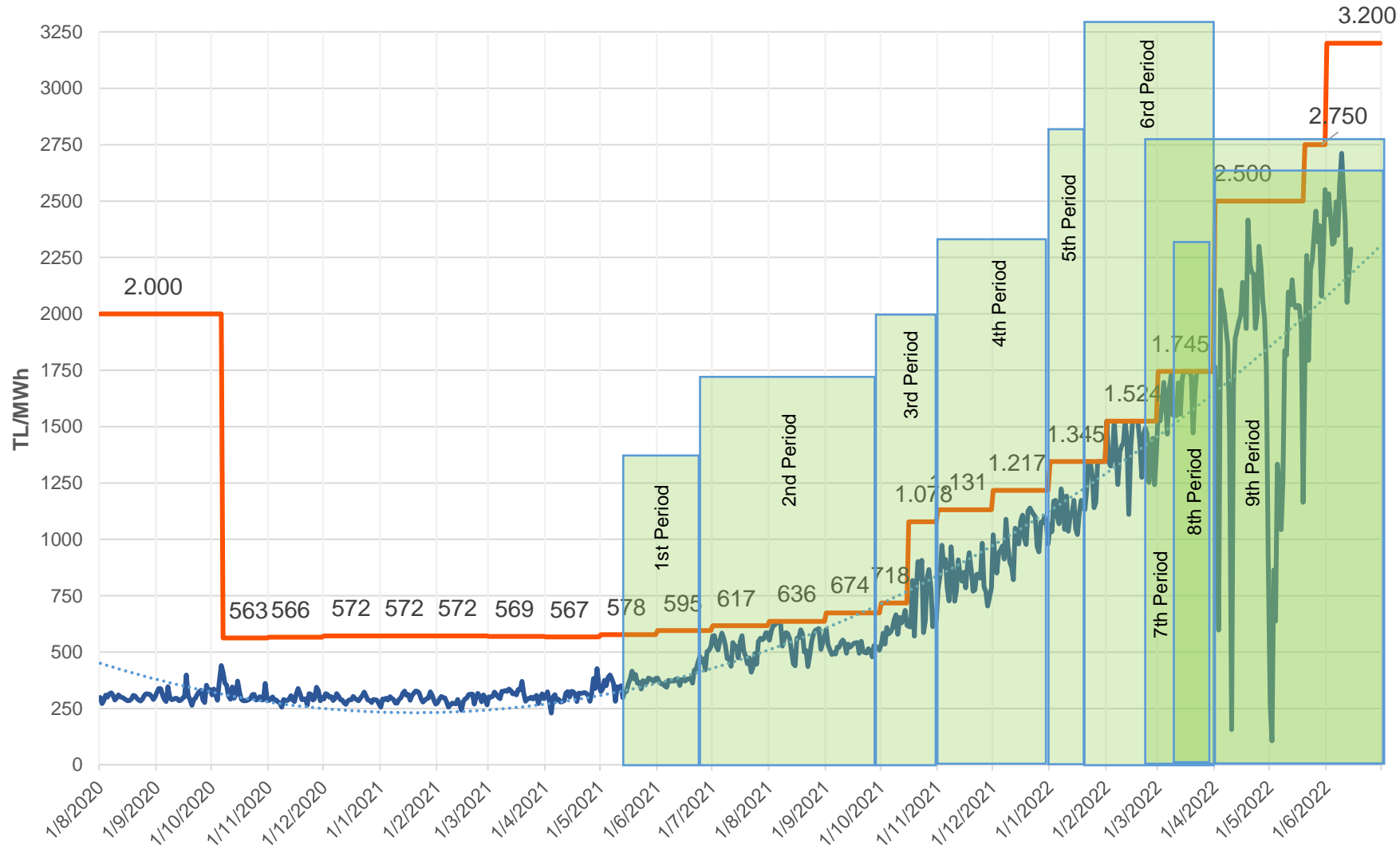
Commodity indices are calculated and shared by the World Bank on a monthly basis to indicate price developments of various commodities across the globe



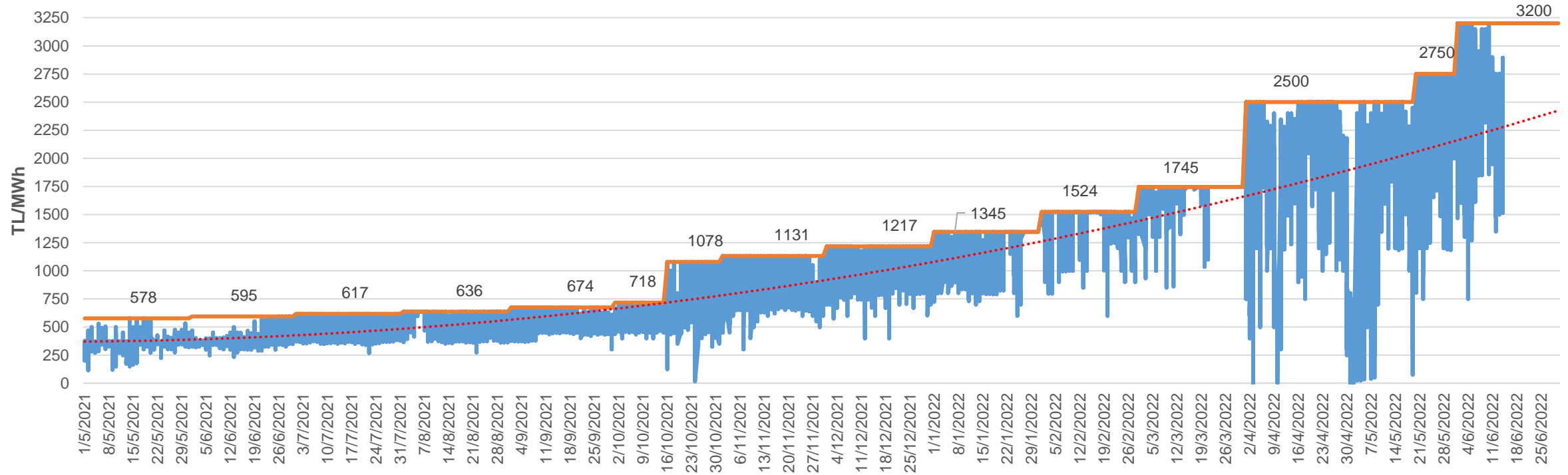
Europe vs Türkiye DAM reference prices (€/MWh)*



- Regulation Change for Collaterals (imbalances)
- Difficulties for market activities
 - Eligible customer portfolio
 - Energy costs (imbalances in invoices)
 - End-user price increase
 - Long term Bilateral Contract impossibilities

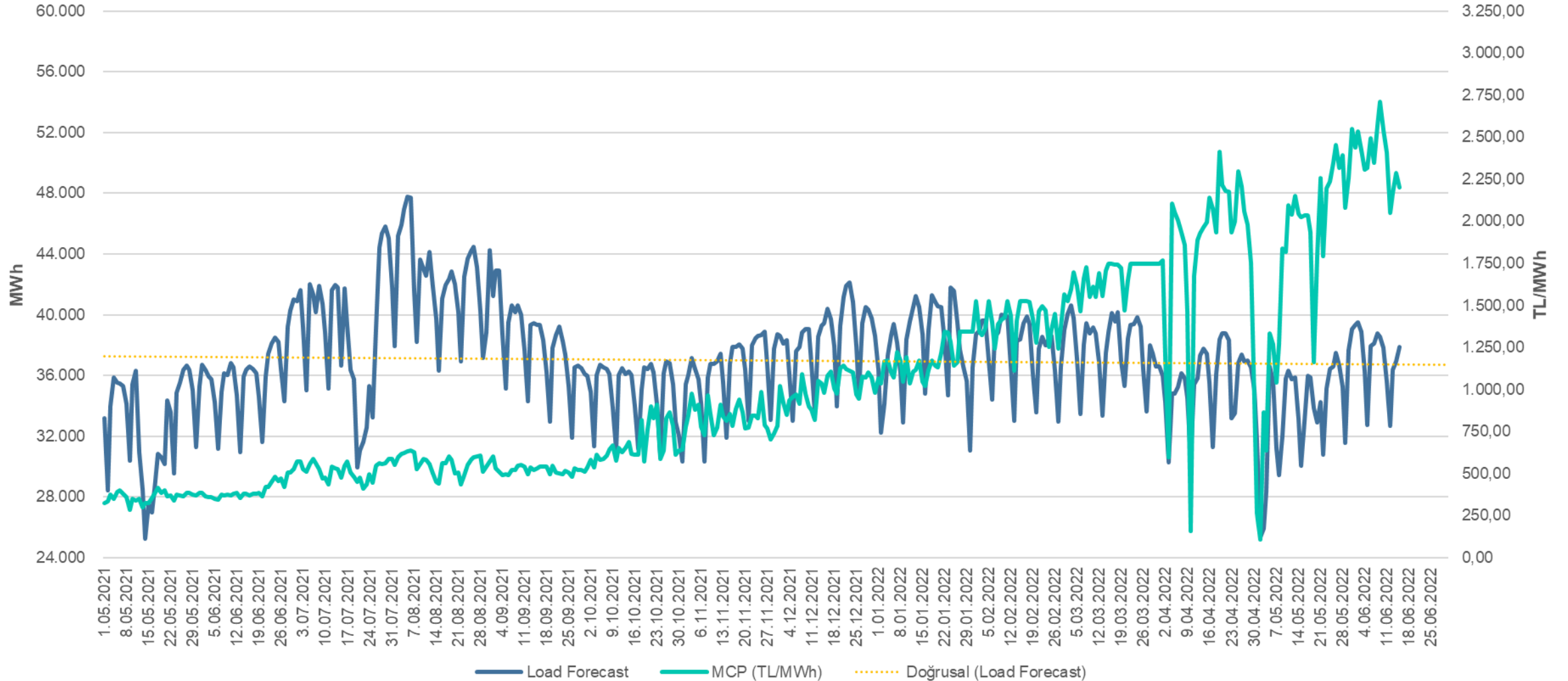


1st Period (13th May-20th Jun) <ul style="list-style-type: none"> Escalated Coal Prices
2nd Period (21st Jun-26th Sep) <ul style="list-style-type: none"> Hot weather and Load & Cap Increase Curtailments
3rd Period (27th Sep-29th Oct) <ul style="list-style-type: none"> Coal Outages
4th Period (30th Oct-31st Dec) <ul style="list-style-type: none"> Gas tariff increase for Power Plants by State Gas Company
5th Period (1st Jan-20th Jan) <ul style="list-style-type: none"> Increases in Electricity and Gas Tariff Cold spells– Load Increase
6th Period (20th Jan-31st Mar) <ul style="list-style-type: none"> Gas flow stop from Iran Cold spell-Load increase
7th Period (24th Feb-) <ul style="list-style-type: none"> Russian invasion of Ukraine
8th Period (15th Mar-29th Mar) <ul style="list-style-type: none"> Block order abuses
9th Period (1st Apr-) <ul style="list-style-type: none"> Price cap based on fuel type

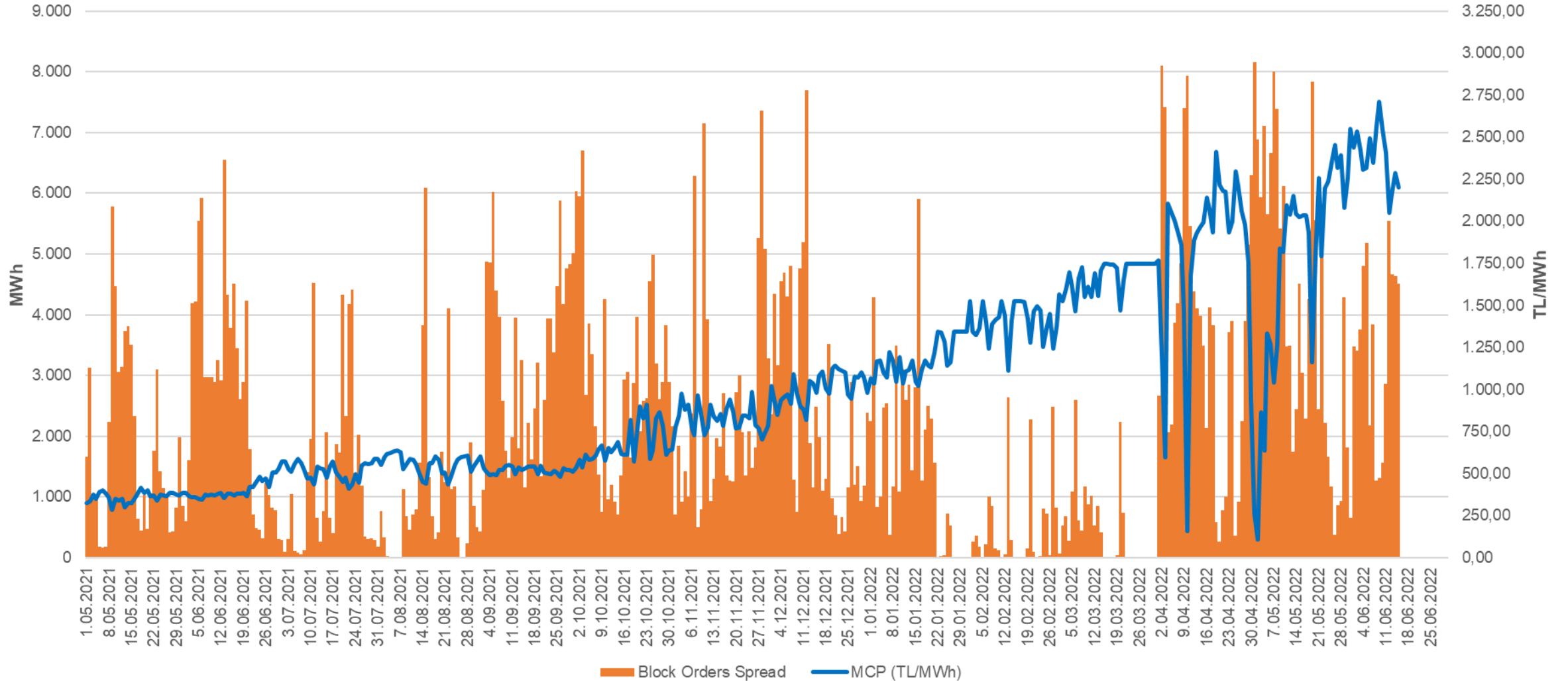


MCP	May.21	Jun.21	Jul.21	Aug.21	Sep.21	Oct.21	Nov.21	Dec.21	Jan.22	Feb.22	Mar.22	Apr.22	May.22	Jun.22
Price Cap	578	595	617	636	674	718/1078	1131	1217	1345	1524	1745	2500	2500/2750	3200
MCP Avg.	360	402	518	557	520	669	831	1009	1178	1404	1671	1831	1763	2401
Cap Density	1%	5%	40%	52%	9%	23%	18%	27%	39%	54%	65%	12%	11%	1%

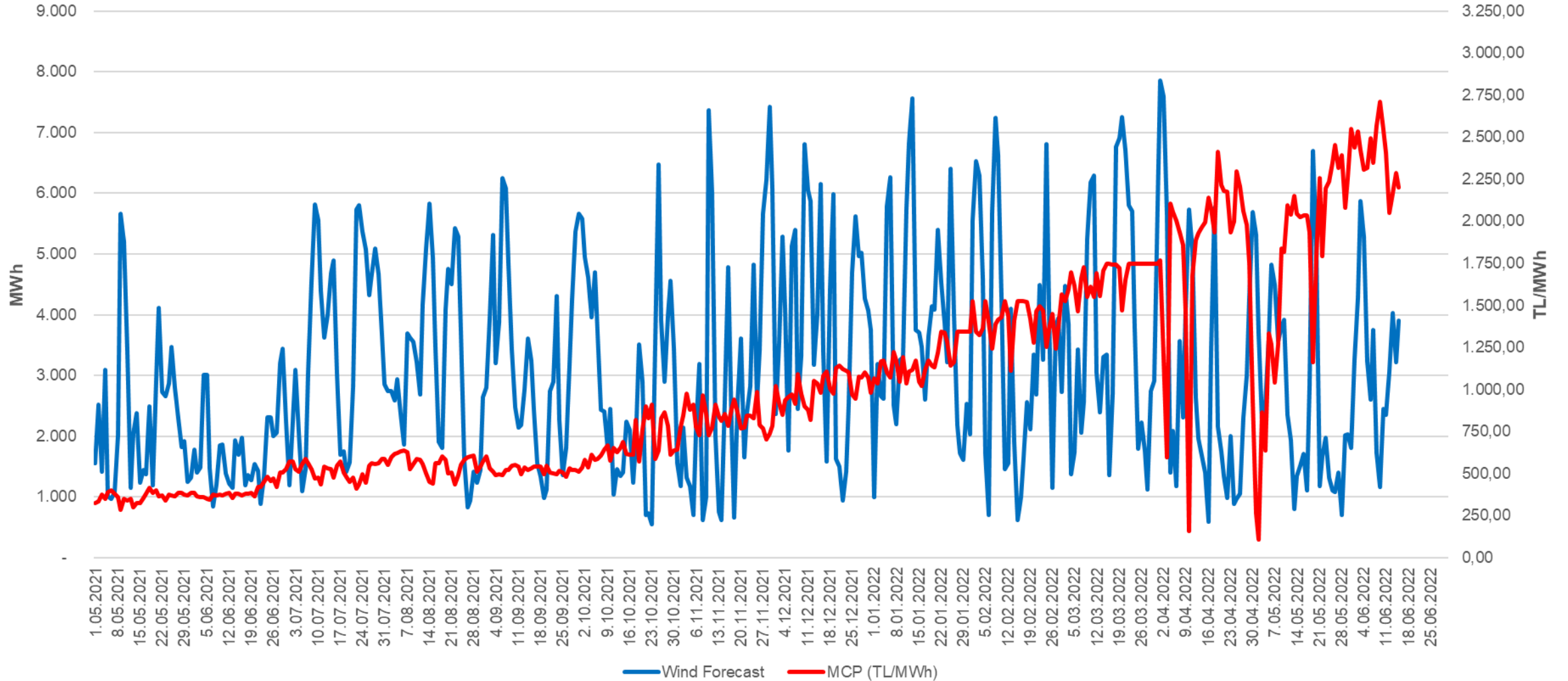
Load Forecast and MCP



Block Order Spread and MCP



RiTM and MCP



THANK YOU

Dr. Tamer EMRE
Director of Market Operations
tamer.emre@epias.com.tr