S&P GlobalCommodity Insights

Understanding demand - Global Volumes and Prices - Where are markets heading? (includes IREC, N. America, UK)

REC Market Meeting 2024

Bruno Brunetti, Head of Environmental markets and PPA analysis

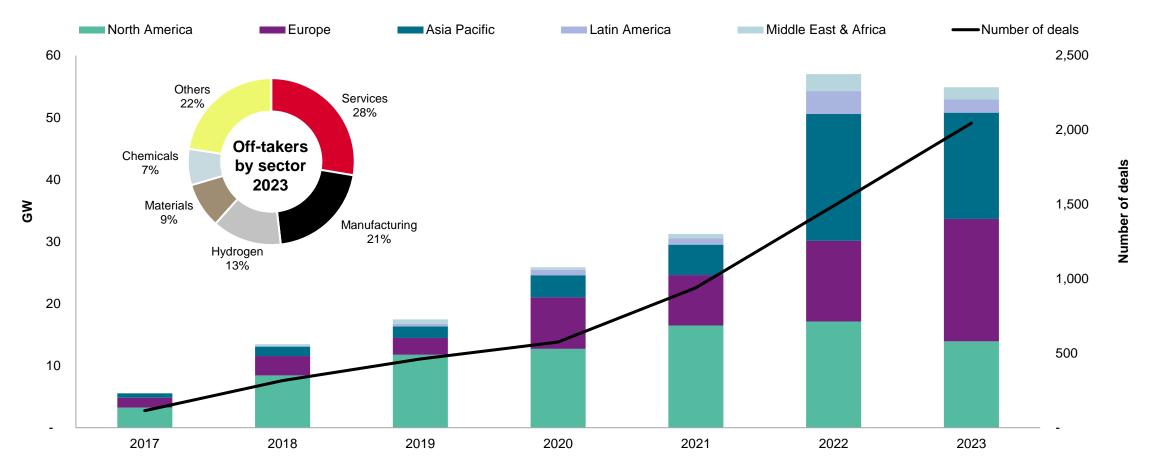
April 2024

Key takeaways

- Role of demand: growing momentum around corporate sector voluntary commitments, with a record number of deals, but also broadening green procurement across regions, geographies and sectors.
- I-REC markets in particular continue to see strong momentum, but issuance is growing generally faster than redemption. Supply generally dominated by hydro issuance, but growing role of wind. Issuance ratios are generally low, suggesting supply likely outpace demand growth and keeping prices under check
- US voluntary REC prices moving downward slightly, reflecting the acceleration of renewables capacity, in particular solar PV additions in Texas and South-East US. In compliance markets, many state programs are at or even above alternative compliance payment (ACP) levels, limiting upside price mobility.
- UK REGOs prices have been trending lower, but remain volatile: higher domestic issuance will continue narrowing the unbalance set by the phaseout of EU GO imports.

Corporate sector clean power procurement announcements: record number of activity in 2023, with deals also broadening across regions and sectors

Corporate clean energy procurement activity, GW

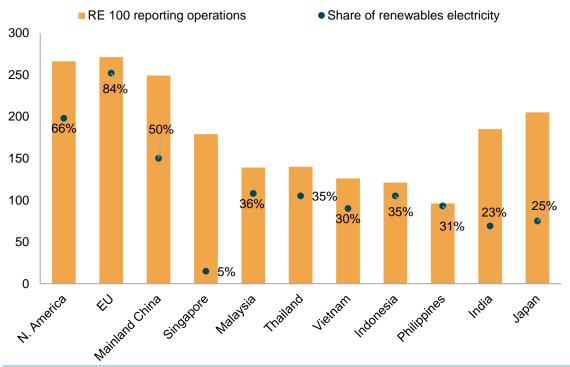


Data compiled Feb. 20, 2024 Source: S&P Global Commodity Insights.

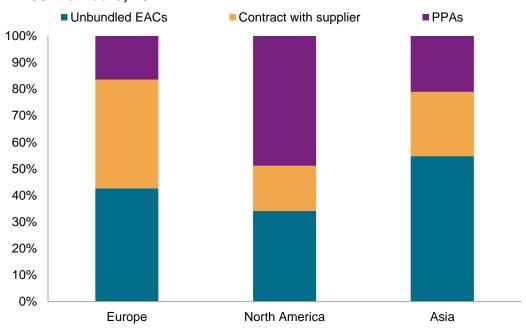


Companies are accelerating reducing scope 2 emissions; 70% of RE 100 new joiners in 2023 are headquartered in APAC

RE 100 operations across major regions and share of renewable electricity (2022)



Green power sourcing options breakdown by region reported by RE100 members, 2022



North American and European corporations' targets are imminent in the next five to eight years. While most of the corporations announcing 100% renewable commitments in Asia-Pacific set targets to be achieved post-2040. North America and European corporates also have supply chains and operations in Asia-Pacific markets, pushing for faster clean energy procurement in those markets.

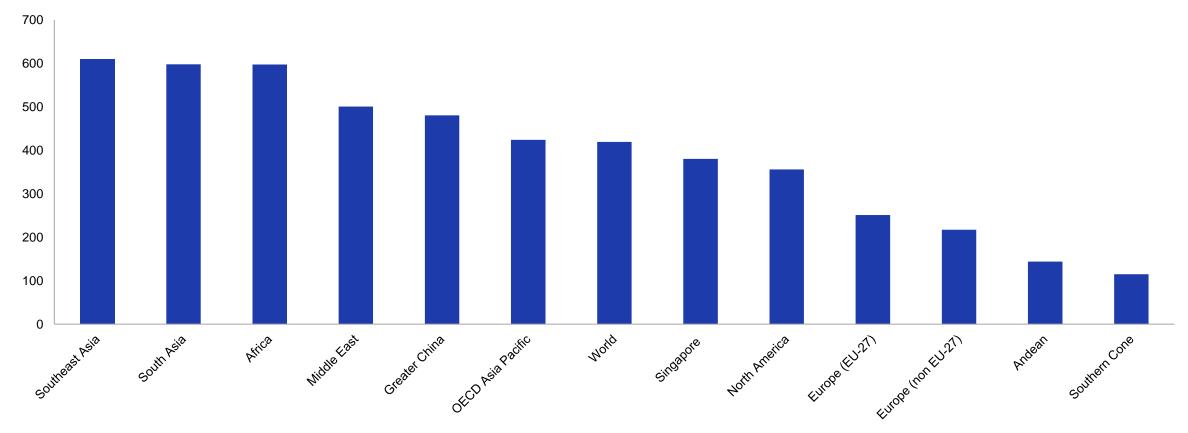
Data compiled March 2024.

RE100 is a global corporate renewable energy initiative with corporations joining it targeting to procure 100% of their electricity requirement from renewable energy sources. Source: RE100.



Carbon intensity of the grid in APAC and AME among the highest of the world, underpinning the need for decarbonization action

Average of power grid emission intensities across major regions gCO₂/kWh (2023)

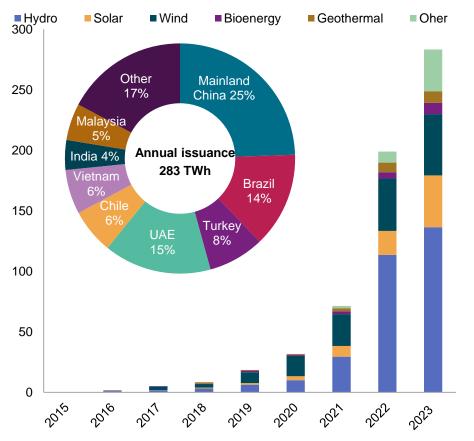


Data compiled March 2024. Sources: S&P Global Commodity Insights.

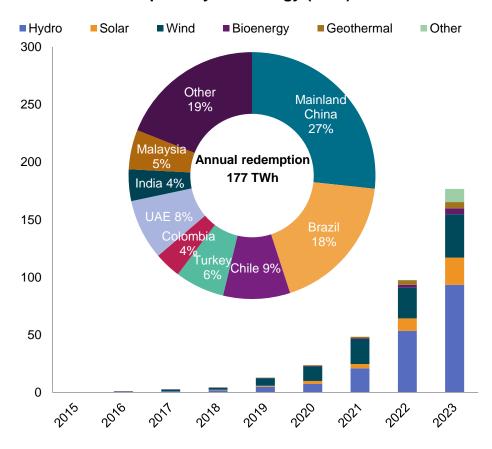


Global I-REC market continue to see strong momentum; although redemption is growing strongly, issuance is generally growing faster

Global annual issuance by technology (TWh)



Global annual redemption by technology (TWh)

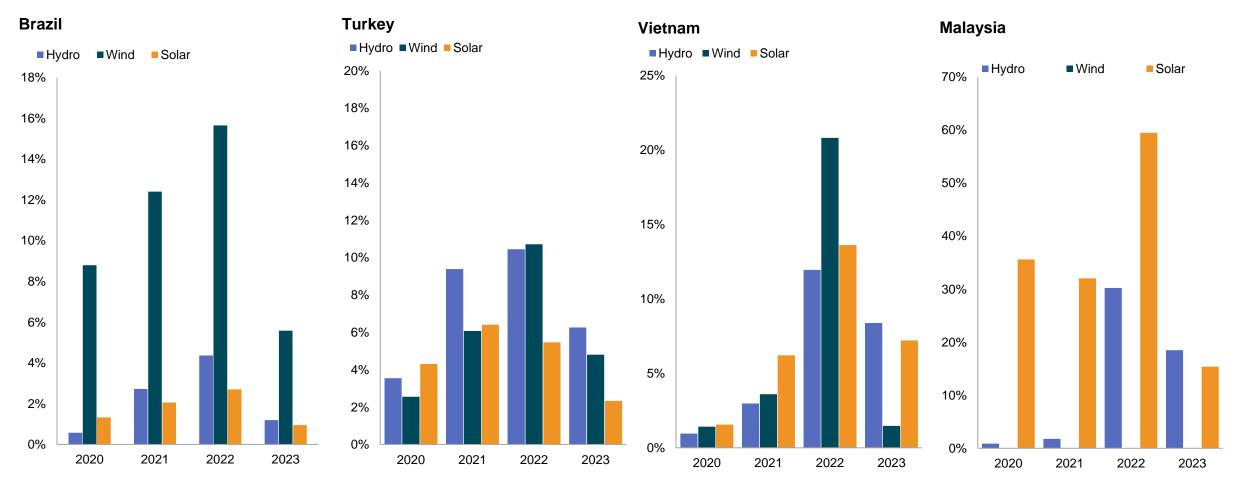


^{*}Prices for Malaysia prior to February 2024 are estimated based on market heards, others are monthly averages from S&P Global Platts I-RECs daily price assessments. Data compiled March 2024

Sources: I-TRACK; S&P Global Commodity Insights.



Issuance ratios key markets: supply potentially large to address demand, but tightness in South East Asia. Wind generally ahead of solar.

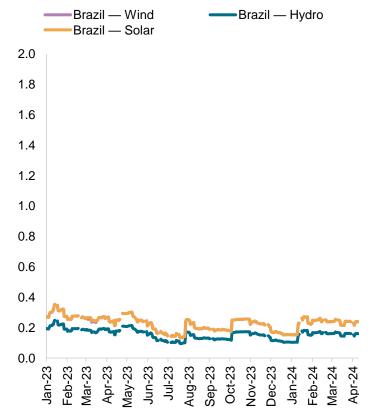


Data compiled: April 2024
Sources: I-TRACK; S&P Global Commodity Insights.

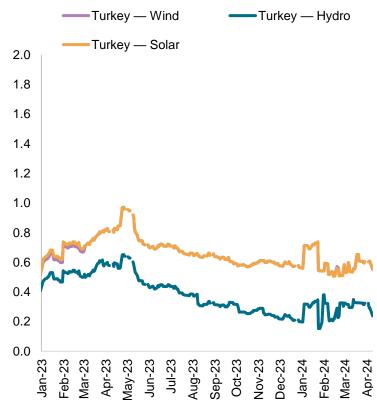


Prices generally low, with wind/solar IRECs at premium versus hydro.

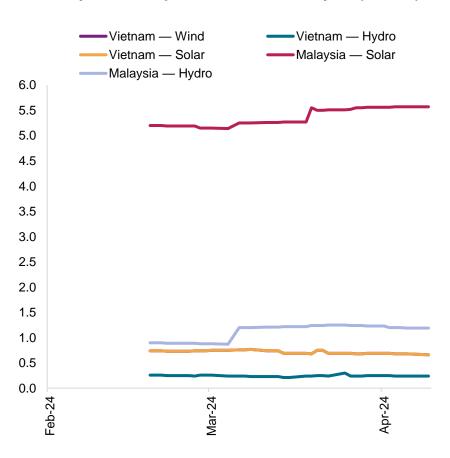
Current year I-REC prices: Brazil (\$/MWh)



Current year I-REC prices: Turkey (\$/MWh)



Current year I-REC prices: Vietnam/Malaysia (\$/MWh)

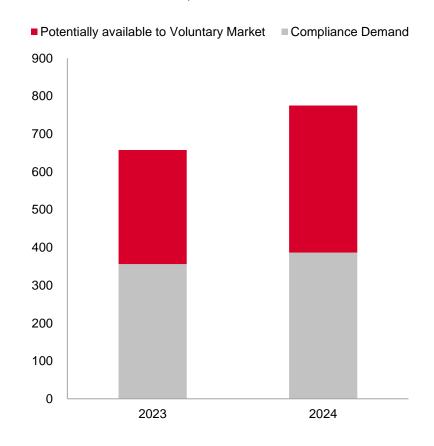


Data compiled April 2024. Sources: S&P Global Commodity Insights.

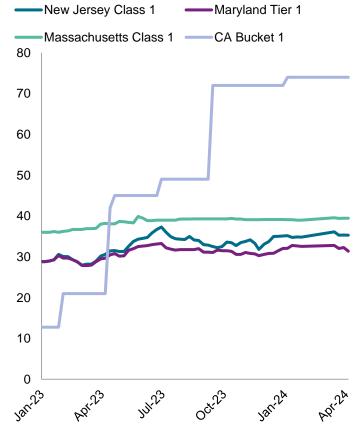
S&P GlobalCommodity Insights

US voluntary REC prices likely to stay weak as renewables newbuild grows Compliance REC prices are at or above alternative compliance payment levels

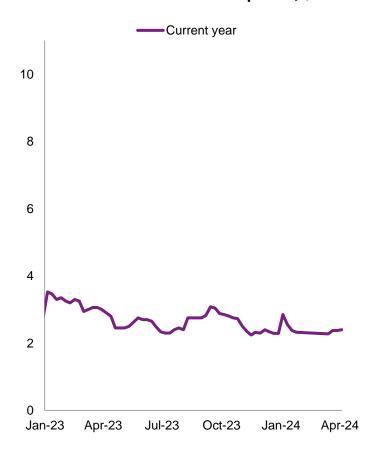
Renewable Generation, TWh



Current-year Compliance REC prices, \$/MW)



National Green-e certified REC prices, \$/MWh



Data compiled April 2024

RPS = Renewable Portfolio Standard, CES = Clean Energy Standard

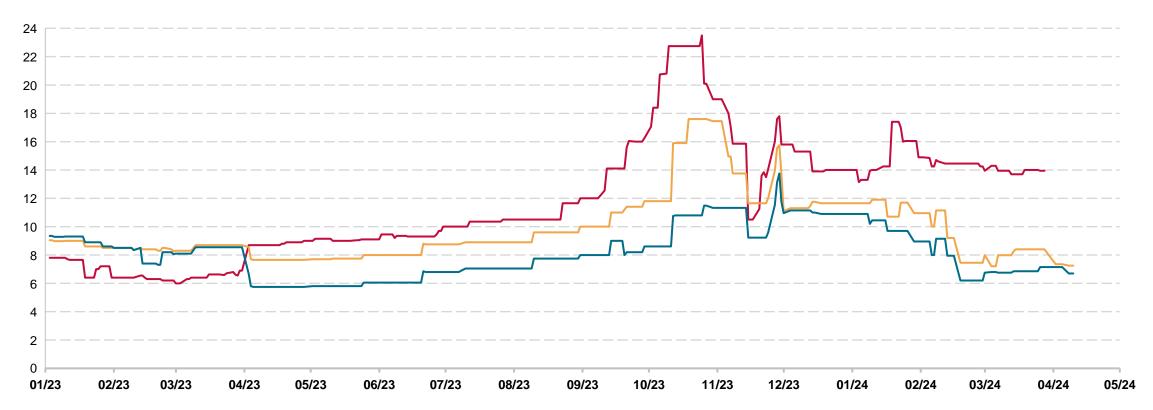
Sources: S&P Global Commodity Insights.



UK REGO prices trending lower, as higher domestic issuance set to further narrow the market unbalance

REGO price development, Current CP, CP1, CP2 (GBP/MWh)

— UK Non-Bio REGO Current CP — UK Non-Bio (REGO) CP01 — UK Non-Bio REGO CP02



Data compiled April 2024

Source: S&P Global Commodity Insights.



Thank you!

CONTACT US

Bruno Brunetti

Bruno.brunetti@spglobal.com

www.spglobal.com/commodityinsights

https://www.spglobal.com/commodityinsights/en/products-services/energy-transition

