

Dragoman Digest

US announces global carbon trading mechanism at COP27

The focus is to promote capital flows from developed countries in the developing world

Lacking progress at COP27 last week in establishing an international carbon trading scheme under the Paris Agreement rulebook, the **US** appears to be moving ahead with its own mechanism. This scheme has been dubbed the Energy Transition Accelerator (ETA). Details are scant, but participating economies will have the option to generate carbon offsets at an unspecified "fixed price". Under the proposal, only private companies with "science-based targets" and mid century net zero ambitions will be able to purchase these offsets. Five percent of all credits will go towards funding "climate adaptation and resilience". **Chile** and **Nigeria** have expressed interest in participating. At face value, the ETA appears to duplicate the global trading mechanism proposed under [Article 6](#) – the framework for which was agreed at last year's COP. Like the scheme proposed under Article 6, the ETA aims to promote investment by rich countries in low carbon opportunities in developing economies.

President **Biden's** Special Presidential Envoy for Climate, John Kerry – the architect of the ETA – aims to have it up and running by COP28. A great deal of detail will need to be decided before then, including how emissions reductions will be verified and the rules for eligible projects. Whether carbon capture and storage (CCS) and other contentious technologies are included is undecided.

Russia-Ukraine military inventories rapidly decline as conflict enters tenth month

Ability to procure and manufacture ammunition will be a crucial determinant in the conflict's outcome

After 10 months of conflict, both **Russia** and **Ukraine's** military arsenals have been depleted to critical levels. At the height of fighting in the summer, the Russian and Ukrainian militaries were firing about 60,000 and 20,000 shells a day, respectively. Russia is now firing around 20,000 artillery rounds per day, while Ukraine is firing between 4,000 to 7,000 rounds daily. In addition to ammunition shortages, Russia has lost more than 1,500 of its tanks since February – over half of its 40-year-old fleet. Ukraine's allies are [scrambling](#) to find increasingly scarce Soviet-era equipment to replenish the country's stockpiles – including S-300 air defence missiles, T-72 tanks, and Soviet-calibre artillery shells.

The ability to top up inventories will be crucial to both militaries' campaigns through the winter. On Russia's side, Western [sanctions](#) and [export controls](#) have weakened its industrial base. Moscow is now looking elsewhere for equipment. It has taken the extraordinary step for a country that had been considered a first rate military power – to buy [artillery](#) from **North Korea** and military drones from **Iran**. It is thought that **India** is supplying Moscow weaponry from its [arsenal](#) of its Russian military equipment and ammunition. For Ukraine, allied resolve will be critical. To date, the US has provided US\$19.3 billion in military aid to Ukraine and yesterday [announced](#) a large air defence and energy equipment support package. Members of the US defence community have expressed concern that the drawdown in US military inventories will exacerbate its US\$19 billion arms sales backlog to **Taiwan**.

Tokyo moves to build out ammonia supply chain

Ammonia provides a costly but much needed greener energy supply for resource-poor Japan

In a step toward establishing an integrated supply chain for ammonia to supplement coal-fired power in **Japan**, the country's largest utility, JERA, will [partner](#) with Mitsui O.S.K and Nippon Yusen to develop commercial-scale ammonia carriers. Under an MOU, the group will develop up to three ammonia carriers with a capacity of 50,000-60,000 tonnes – up from the 30,000-40,000 tonne limits on ammonia ships today – and an import terminal. JERA plans to trial 50 percent ammonia co-firing at its 1GW Hekinan 5 coal-fired power plant by FY2028, and shift to 100 percent ammonia plants by 2050. JERA plans to import ammonia from **Australia**, the Middle East, and **US**.

JERA's plans align with Tokyo's energy strategy. Japan aims to import 3 million tonnes of ammonia per year by 2030 and 30 million by 2050. However, Japan needs to overcome several hurdles to achieve its vision. Co-firing with ammonia is costly. Bloomberg New Energy Finance [forecasts](#) that in 2050, the Levelised Cost of Electricity (LCOE) of a retrofitted plant which uses 50 percent green ammonia will be US\$140/MWh. BNEF thinks the LCOE of offshore wind in 2050 will be US\$103/MWh. Meeting massive demand is another challenge. According to the Ammonia Energy Association, Japan will require approximately [50 million](#) tonnes of ammonia each year to co-fire its 49GW coal fleet with 20 percent ammonia. With Japan's clean energy options constrained because of lack of suitable land for renewables and the fraught politics of its nuclear energy, the expensive ammonia option reflects Japan's limited choice.

Turkey targets Algeria in latest overseas gas play

Exploration is expected to have a high price tag despite Turkey's economic travails

In early November, **Turkey** [formed](#) a joint venture (JV) between Turkish Petroleum (TP) and **Algeria's** Sonatrach. Under the JV, TP and Sonatrach will establish a separate company to explore oil and gas reserves in Algeria and neighbouring countries. With Algeria's oil and gas sector being quite mature, the JV will focus on drilling more speculative locations. Turkey lacks expertise in exploration. This has not prevented Ankara from potentially risky behaviour in the past, with Turkey opting to go at it alone rather than sharing risk in exploring its US\$3.5 billion Black Sea gas reserves.

Turkey is likely mindful of the need to secure favourable gas prices given cutthroat competition from European countries for non-**Russian** gas supplies. As Turkey's fourth largest gas provider, Algeria currently supplies 4.4 billion cubic metres (bcm) of Turkey's 60 bcm annual gas consumption through a contract set to expire in 2024. Algeria's geopolitical importance given its proximity to **Libya**, a country which incidentally is pivotal to Turkey's own gas ambitions, may be another driver. In October, Turkey [struck](#) a preliminary agreement to explore gas in Libya's share of the Mediterranean.

Automakers campaign for respite from stringent US EV battery requirements

The cost of excluding Chinese content appears to be prohibitive for most automakers

Major automakers including Ford, Stellantis and Volkswagen are advocating a [softening of](#) the electric vehicle (EV) provisions of the **US** Inflation Reduction Act (IRA). Under terms set out in the IRA, from 2024, automakers must ensure that 40 percent of battery components are extracted or processed in the US or a free trade partner in order to qualify for a US\$7500 tax credit. This requirement will gradually increase to 80 percent by 2027. Also in 2024, manufacturers must prove that components are not assembled by a yet-to-be-defined “foreign entity of concern”. The same requirement will apply to minerals processing from 2025.

The IRA is clearly targeting **China**, which [is home to](#) 75 percent of the world’s battery cell manufacturing capacity. A sudden exclusion of China’s battery supply chains would set the bar too high for manufacturers, given long lead times for establishing upstream supply sources and sophisticated processing expertise required to manufacture battery components, such as cathode active materials.

Manufacturers are pitching their own solutions. Volkswagen proposes a 10 percent threshold for the “foreign entity of concern” label whereas Ford wants the “foreign entity” requirement to be disregarded for US-based companies. These companies will have until the end of the year to campaign their changes before the requirements are finalised. Washington’s flexibility in operationalising the IRA will be crucial for its relationship with key allies and the efficacy of its EV push.