

Natural Resources PC

A weekly Report on Climate Change, ETS and Green Finance

For more information pls contact:

Mr Vasili Nicoletopoulos

Founder

Natural Resources PC

v.nicoletopoulos@naturalresources.gr

http://naturalresources.gr/

EUA



21,26 €/mtCO₂



Climate Change, ETS, Green Finance [M2013-17]

Weekly Report No 271

Not to be transmitted to third parties

References available upon request

Mar 12-19 '19

ArcelorMittal has to refund GHG quotas to the State,

BNP Paribas fund to exclude some coal and mining companies, p3

Germany ready to join global coal phase-out alliance, p3

US SEC sues VW over emissions fraud on investors, p7

EEX reconfirms its support for the development of national ETS in China, p9

Large-scale solar set for double-digit growth, p11

ICAP Status Report 2019: Emissions Trading Worldwide, p13

EU

Shell striving to become world's top power company, Mar 12 '19

The world's second-largest oil explorer by market value is spending up to \$2 billion a year on its new energies division, mainly to grow in a power sector it envisions delivering 8-12% annual returns, according to Maarten Wetselaar, director of Shell's integrated gas new energies unit.

"We believe we can be the largest electricity power company in the world in the early 2030s," Wetselaar said. "We are not interested in the power business because we like what we saw in the last 20 years. "We are interested because we think we like what we see in the next 20 years."

European oil producers such as Shell, BP and Equinor face greater regulatory and investor pressure to adopt clean energy than American rivals ExxonMobil and Chevron.

<https://royaldutchshellgroup.com/2019/03/12/shell-striving-to-become-worlds-top-power-company/>

ArcelorMittal has to refund GHG quotas to the State, Mar 12 '19

Not the outcome steel giant ArcelorMittal had hoped for. The legal dispute with the government started several years ago...

The administrative court deemed the appeal of the State justified. Steel producer ArcelorMittal's appeal against Marco Schank's decision dating back to June 2013 was rejected.

Marco Schank, who was Minister for Sustainability and Infrastructure at the time, had asked ArcelorMittal to return nearly 81000 quotas of GHG emissions by the end of July. The appeal against the decision [September 2013] was also rejected.

The administrative tribunal had considered the steel producer's appeal as founded and therefore annulled Marco Schank's decision, as well as the legal confirmation thereof.

The first set of judges believed that ArcelorMittal had been unjustly stripped of the nearly 81000 quotas of GHG emissions. The State appealed against this verdict in August last year. This story originally began in 2011: at the end of the 2011, ArcelorMittal decided to close its steelwork in Schiffflange for an indefinite amount of time. The Luxembourgish authorities, however, had only been notified of said decision several months after the allocation of free GHG quotas for 2012 had been completed. Following the notification of cessation of activity, the government requested the refund of the quotas unduly received by ArcelorMittal.

<https://today.rtl.lu/news/luxembourg/a/1317978.html>

Greece's Public Power relaunched coal-fired power plants sale, Mar 13 '19

Greece's Public Power Corp [PPC] relaunched the sale of three coal-fired power plants on Friday with a March 15 deadline for expressions of interest, after a previous tender last month failed to attract any satisfactory bids.

Former bidders, which include Mytilineos, GEK Terna, and Beijing Guohua Power Company, are entitled to express interest in addition to new ones, according to the tender document.

PPC, which is 51 pct state-owned, is selling the plants in northern Greece and the southern Peloponnese region after a EU court ruled it had abused its dominant position in the coal market. PPC has said it wants to conclude the sale by May and that it has been in touch with investors from the US, Russia and China to attract new bidders.

<https://www.reuters.com/article/us-publicpower-sale-relaunch/greeces-public-power-relaunches-coal-fired-power-plants-sale-idUSKBN1QU1IJ>

Jaguar Land Rover recalls 44,000 cars over CO₂ levels, Mar 14 '19

Jaguar Land Rover has been forced to recall more than 44,000 cars for repairs after UK regulators found some models were emitting more CO₂ than previously thought.

The Vehicle Certification Agency found 10 models for the Land Rover and Jaguar brands were emitting more GHGs than had been certified initially. JLR then informed the Driver and Vehicle Standards Agency, which handles recalls, of the findings. -- Britain's largest carmaker will have to carry out free repairs on the models.

JLR's cars "may emit excessive levels of CO₂ and may not conform with the certified condition", according to the EC's rapid alert system. Recalls of cars to fix safety defects happen fairly often, but full product recalls because of exhaust emissions are rare. It is thought to be the first CO₂-related recall for JLR.

<https://www.theguardian.com/business/2019/mar/13/jaguar-land-rover-recalls-cars-over-carbon-dioxide-levels>

BNP Paribas fund arm to exclude some coal, mining companies, Mar 15 '19

BNP Paribas Asset Management, the investment management arm of the French bank, is to stop investing in companies that obtain more than 10 pct of their revenue from thermal coal.

The exclusion of such companies producing thermal coal and generating electricity from coal was announced on Thursday and will come into effect at the start of next year as part of the fund's strategy to reduce economic risk within its portfolios as coal becomes uncompetitive as a fuel for power generation.

Fossil fuel divestment has gathered pace over the past few years as pension funds, sovereign wealth funds and universities have sold oil, gas and coal stocks, especially after the 195-nation global climate agreement signed in Paris set a goal in 2015 of phasing out the use of fossil fuels this century.

<https://www.hellenicshippingnews.com/bnp-paribas-fund-arm-to-exclude-some-coal-and-mining-companies/>

Germany ready to join global coal phase-out alliance: environment minister, Mar 15 '19

Germany is ready to join an international alliance committed to phasing out coal use, environment minister Svenja Schulze has told national newspaper Taz.

A specially appointed commission advised in January the country can stop burning coal by 2038. On Thursday, chancellor Angela Merkel formed a "climate cabinet" from different ministries to steer a framework climate law through parliament.

These domestic steps put Germany, one of the heaviest coal users in Europe, in a position to share its commitment with the world, according to Schulze.

“We can now finally join the international alliance of coal-exit countries and the Powering Past Coal Alliance,” she said, in an interview with Taz, Die Tageszeitung’s weekend edition, shared before publication with Climate Home News. “I will get this on it its way.”

<https://www.climatechangenews.com/2019/03/15/germany-ready-join-global-coal-phase-alliance-environment-minister/>

Cyprus subsidy plan for renewable energy & energy saving approved by Energy Ministry, IENE, Mar 16 ‘19

On March 7, as announced by Minister Lakkotrypis, the Cabinet approved a subsidy plan for Renewable Energy Sources [RES] and Energy Saving [ES]. In his statements at the Presidential Palace of Cyprus, Mr. Lakkotrypis said that “Today, the Cabinet decided and approved a subsidy plan for Renewable Energy Sources [RES] and Energy Saving [ES], with a total cost of 24.5 million euros, which is having all households as target audience. This plan contains three categories.

1. The 1st category concerns subsidy for thermal insulation of ceilings, a plan that is actually active while the maximum subsidy amount increases from 1250 euros to 1500 euros.”
2. The 2nd plan concerns the installation of photovoltaic systems using the net metering method as well as the subsidy of a maximum amount of 1000 euros, while
3. The 3rd plan concerns the combination of the two, i.e. thermal insulation and installation of PV systems with a maximum subsidy amount of 3000€.

UK railway electrification costs could be halved, Mar 18 '19

A report published by Railway Industry Association [RIA] has found that electrification works in the UK can be delivered at a cost 33%-50% lower compared to previous upgrade projects.

The report utilised domestic and international instances to demonstrate that the cost of railway electrification has fallen. It also noted that with a rolling programme of work, the costs can be reduced even further.

Railway Industry Association technical director David Clarke said: “The Railway Industry Association’s Electrification Cost Challenge shows how rail electrification can be delivered at 33%-50% of the cost of some past projects if the Government commits to a rolling programme of work.<https://www.railway-technology.com/news/uk-railway-electrification-costs-could-be-slashed-by-half/>

Rio asks shareholders to vote against emissions resolution, Mar 18 '19

Rio Tinto said on Monday it would recommend that shareholders vote against a resolution requiring the miner to report its direct emissions and those of its customers in greater detail.

In a notice ahead of its annual general meeting in May, Rio said shareholders should vote against the proposed rule change that would have it set transition plans that adhere to the goals of the Paris Agreement to limit global warming to 1.5 degrees Celsius [2.7 Fahrenheit].

Those plans would include short-, medium- and long-term targets to reduce scope 1, 2 and 3 GHG emissions, and detailed strategies to meet the targets in each annual report starting from 2020, according to the proposed resolution.

Scope 1 emissions refer to direct emissions from company's activities, scope 2 emissions are indirect such as from purchased power. Scope 3 emissions are those created by customers of a company's product.

"Rio Tinto is currently undertaking detailed engineering, economic and policy analysis on an asset-by-asset basis to inform new Scope 1 and 2 emissions reduction targets to replace our existing targets, which expire in 2020," Chairman Simon Thompson said in a filing to the Australian bourse.

Rio Tinto, which released its own climate change report last month, advised voting against the plan because it was not in control of its customers emissions, and because an analysis it was currently undergoing was based on a different framework.

<https://www.euronews.com/2019/03/18/rio-asks-shareholders-to-vote-against-emissions-resolution>

Norton Rose 5-19 March 2019

Spain/ Energy-intensive companies - On 8 March 2019, the EC approved the increase in budget of an aid scheme to compensate energy-intensive companies in Spain, which the EC originally approved in 2013.

Spain/ Energy efficiency - On 7 March 2019, the EC decided to refer Spain to the European Court of Justice for not ensuring that the requirements on individual metering in multi-apartment and multi-purpose buildings laid down in the Energy Efficiency Directive (Directive 2012/27/EU) are complied with.

Energy efficiency - On 12 March 2019, a call for proposals for the Secure, Clean and Efficient Energy topics of the Horizon 2020 EU funding program was launched. Around EUR 112 million of EU funding is now available for energy

efficiency research, innovation and market uptake. The deadline for applications is 3 September 2019.

EEA- EFTA Countries

Norway's Norsk Vind plans building 1.5-GW zero-subsidy wind farm, Renewables Now, Mar 18 '19

Norwegian wind power developer Norsk Vind Energi AS last week announced plans for the construction of a 1.5-GW onshore wind power complex at home without government subsidies. The plant, which will rank among the largest ones in Europe, will be called Hordavind and will be located in Nordhordland district, western Norway.

The construction of the facility is planned to start in 2023, with its power expected to be priced at less than DKK 0.3 [USD 0.046/EUR 0.040] per kWh, according to Norsk Vind's general manager Per Ove Skorpen. He noted that currently most of Norway's wind parks are set up by foreign players but a change in the country's legislation has now opened opportunities for investment in this sector by local companies, as well.

EU Transaction Log – Ireland

EU Transaction Log presents details of emission rights for all facilities participating in the EU ETS [includes data for all countries and for all years from the start of the ETS]. The table below presents some Irish installation names, allowances and status for the Phase 3 [2013-2020] period for 2019.

Installation Name	Allowance Allocation *	Status
Irish Cement Limited [Limerick Works]	591979	Open
Irish Cement Limited [Platin Works]	1074651	Open
Lagan Cement	375889	Open
Scotchtown Cement Works	786854	Open
RHI Magnesita Premier Periclase Limited	155527	Open
Smurfit Paper Mills		Closed
Huntstown Power Station		Open

**in current ETS period before last 30 April*

USA

When paying \$1 for a coal power plant is still paying too much, Mar 12 '19

One dollar. That's how much an aging New Mexico coal plant is worth. And by some estimates, even that may be too much.

Acme Equities LLC, a New York-based holding company, is in talks to buy the 847-megawatt San Juan Generating Station for \$1, after four of its five owners

decided to shut it down. The fifth owner, the nearby city of Farmington, says it's pursuing the bargain-basement deal with Acme to avoid losing about 1,600 direct and indirect jobs in the area.

Acme's interest comes as others are looking to exit a coal industry that's been plagued by costly anti-pollution regulations. Acme's plan: Buy the plant "at a very low cost," invest in carbon capture technology that will lower emissions, and then sell the captured CO₂ to oil companies, said Larry Heller, a principal at the holding group. By doing this, Acme "believes we can generate an acceptable rate of return," Heller said in an email.

Meanwhile, San Juan's majority owner, PNM Resources Inc., offers a distinctly different view. A 2022 shutdown will push ratepayers to other energy alternatives now being planned, saving them about \$3 to \$4 a month on average, PNM has said.

http://www.mining.com/web/paying-1-coal-power-plant-still-paying-much/?utm_source=digest-en-mining-190312&utm_medium=email&utm_campaign=digest

RGGI auction surprises traders with yet another above-market result, Mar 15 '19

The northeast US RGGI cap-and-trade program's first auction of 2019 cleared above the secondary market price, results showed Friday, falling well outside of market participants' expectations prior to the sale. <https://carbon-pulse.com/71119/>

US SEC sues Volkswagen, ex-CEO over alleged emissions fraud on investors, Mar 15 '19

The US Securities and Exchange Commission [SEC] is suing Volkswagen [VW] and its former chief executive Martin Winterkorn over the German automaker's diesel emissions scandal, alleging a "massive fraud" on US investors.

VW was caught using illegal software to cheat US pollution tests in 2015, triggering a global backlash against diesel that and has so far cost it 29 billion euros.

Regulators and investors argue VW should have informed them sooner about the scope of the scandal, while VW says it was not clear it would face billions of dollars in fines and penalties as others had paid out much lower sums for similar offences.

The SEC said in its civil complaint on Thursday that from April 2014 to May 2015, VW issued more than \$13 billion in bonds and asset-backed securities in US markets at a time when senior executives knew that more than 500,000 US diesel vehicles grossly exceeded legal vehicle emissions limits.

<https://www.euronews.com/2019/03/15/us-sec-sues-volkswagen-winterkorn-over-dieseldgate>

China

Report mapping China's climate and energy policies, Mar 13 '19

The fourth edition of the report “Mapping China's Climate and Energy Policies” describes, maps and analyzes China's national-level Party, government agencies, academic and research institutions, and state-affiliated enterprise climate actors in China on a policy by policy basis.

The report is supported by the British Embassy in Beijing, the Embassy of the Federal Republic of Germany in Beijing, and the Embassy of Switzerland in China and comprises 12 chapters organized in 3 sections: stakeholders and policy formation process, policies, and future strategy.

<https://www.gov.uk/government/publications/report-mapping-chinas-climate-and-energy-policies>

NEV output rises by 50% vs last year in February 2019, IM, Mar 13 '19

China produced 59,000 new energy vehicles [NEVs] in February 2019, including pure electric vehicles [PEVs] and plug-in hybrids. This was up by 50.9% from February 2018, according to data recently released by the China Association of Automobile Manufacturers [CAAM].

Of the NEVs produced, 44,000 were PEVs, up by 51.3% from the corresponding month last year, and 15,000 were plug-in hybrids [PEVs], up by 48.2% year on year.

Sales of NEVs totaled 53,000 units in February, up by 53.6% year on year. PEV sales rose by 69.4% to 40,000 units, while sales of plug-in hybrids were up by 18.6% to 13,000 units from a year earlier.

Over January-February this year, China produced 150,000 NEVs, up by 83.5% from the corresponding months a year earlier, while total sales rose to 148,000 units over the same two months, up by 98.9% year on year.

In the same two-month comparison, output of PEVs rose by 95.7% to 111,000 units and output of plug-in hybrids increased by 55.2% to 39,000 units. Sales of PEVs were up by 127.9% to 114,000 units, and sales of plug-in hybrids totaled 34,000 units, up by 38.5%.

Prices for lithium, one of the key materials widely used in batteries for NEVs, held steady in early 2019 after most China's producers insisted on current prices after they fell sharply in the second part of 2018.

<https://www.indmin.com/Article/3863956/Chinas-NEV-output-rises-by-50-vs-last-year-in-February-2019.html>

Can the Belt and Road Initiative be green? Mar 19 '19

...China's growth since the turn of the millennium has been largely predicated on its use of fossil fuels. Yet, a repetition of this carbon-rich growth model across 72 countries along the Belt and Road would, of course, be at odds with worldwide commitment to carbon emission reduction. Though China has, in recent years, changed its trajectory by becoming a global leader in renewable technologies, discrepancies remain in China's definition of what constitutes "green."

This is partly due to the country's use of fossil fuels, which amounts to nearly 88 pct of its annual energy consumption. It comes as little surprise, then, that since 2007, China has been the largest emitter of GHG.

But is the tide beginning to turn? As well as being the largest consumer of coal, China is now also home to one-third of the world's wind power, a quarter of its solar panels and the largest electric car market—all part of an effort to increase China's non-fossil fuel capacity from 13 pct to 20 pct by 2030.

And, to fund this vision, China plays a critical role in the development of green financing tools, including green bonds, climate bonds and green loans. China's green bond issuance, for instance, accounted for 39 pct of global totals in 2016—enough to dominate this growing market. And while 82 pct of China's green bonds were issued domestically in 2016, the transition toward green financing is certainly not limited to China's domestic endeavors.

By 2049, it is estimated that \$8 trillion will have been invested into the BRI—making it near impossible for China to rely solely on public finance. As a result, the deputy governor of the People's Bank of China believes that green financing will be a "key pillar" of the BRI's success, a trend already discernible in the financing markets.

<http://www.brinknews.com/asia/can-the-belt-and-road-initiative-be-green/>

EEX reconfirms support for devt of national ETS in China, Mar 19 '19

In a 3-day technical workshop, EEX has engaged with staff of Shanghai Environment and Energy Exchange [CNEEEX] and other Chinese stakeholders, sharing its experience in the operation and supervision of an emissions trading platform. The workshop was organized by Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ] in cooperation with CNEEEX. In addition to EEX, the German Emissions Trading Authority [DEHSt] joined the discussion and provided views from a legal and regulatory perspective.

The discussions which were held in Shanghai between 12-14 March were aimed at supporting the construction of the national ETS trading platform in China. In this context, EEX experts from different departments shared their knowledge in the fields of market operations, market surveillance and business development.

The national Chinese ETS platform which will be operated in Shanghai will form a key element for the national ETS in China in the coming years. It is currently being developed as part of the first phase of the “ETS Development Plan” as outlined by the Chinese government. An essential part of the first phase is a knowledge transfer [“capacity building”] for officials and other stakeholders that are involved in the development of the ETS, and the plan calls specifically for international cooperation.

“EEX is committed to supporting the establishment of ETSs worldwide. We are convinced that the ETS is the most effective tool to reduce carbon emissions”, comments Peter Reitz, CEO of EEX. “The workshop was a great opportunity to share our considerable insights and expertise from Europe and the US and to transfer our knowledge with a view to the specific requirements and opportunities that China currently faces.”

<http://www.mondovisione.com/media-and-resources/news/eex-reconfirms-its-support-for-the-development-of-national-ets-in-china/>

Elsewhere in the World

Global oil and gas FID volumes set to triple in 2019, Feb 22 ‘19

A surge in final investment decisions [FIDs] this year on new petroleum projects worldwide could see sanctioned volumes of oil and gas – excluding shale and tight oil and gas prospects – nearly triple compared to last year’s tally.

The collective volumes could swell past 46bn barrels of oil equivalent [boe], according to research conducted by Rystad Energy.

“We expect global FID volumes in 2019 to triple over last year, and 2019’s megaproject awards could lead to billions of subcontracting dollars in coming years,” said Rystad Energy upstream research analyst Readul Islam. “The only supply segment likely to shrink this year is the oil sands, whereas deepwater, offshore shelf and other conventional onshore developments are all poised to show substantial growth,” he added. “From a geographical perspective, all regions are headed for robust growth except Europe and North America, still bearing in mind that shale plays are not included in these numbers.”

Final investment decisions got off to a good start in the first half of 2018 and were on track to outpace the tally for 2017, but several project deferrals during Q4 – coinciding with a steep drop in oil prices – prevented that from happening.

<https://www.oilandgasmiddleeast.com/drilling-production/33476-global-oil-and-gas-fid-volumes-set-to-triple-in-2019>

Large-scale solar set for double-digit growth: Goldman Sachs, Mar 14 '19

Utility-scale solar power capacity is expected to grow by double digits globally in 2019 and 2020, driven by expansions in the US, Europe, Middle East and China, US bank Goldman Sachs said on Thursday.

Solar power is the fastest growing source of electricity generation, taking market share from fossil fuels like thermal coal and natural gas as governments and companies increasingly introduce clean energy targets.

“We expect the combination of lower costs for solar and favorable policy support providing a multi-year runway for utility-scale to drive meaningful upside to the market,” the US investment bank said in a research note.

Goldman said it expected utility-scale solar installations globally to reach to 108 GW in 2019, up 12 pct on the previous year, and then grow by another 10 pct in 2020 to 119 GW. For 2021 and 2022 the bank expected capacity to reach 129 GW and 135 GW.

<https://www.reuters.com/article/us-solar-power-goldman-sachs/large-scale-solar-power-set-for-double-digit-growth-goldman-sachs-idUSKCN1QV0GI>

EPA scraps new carbon emissions guidelines for resources companies amid industry pressure, Mar 14 '19

The Environmental Protection Authority [EPA] has withdrawn its contentious guidelines requiring major WA resources projects to completely offset their GHG emissions. Top executives from some of the world's biggest resources companies met Premier Mark McGowan this morning to voice their strong opposition to the environmental watchdog's recommendations.

Mr McGowan rang the EPA's chairman Tom Hatton after the meeting to discuss industry's concerns. He said shortly afterwards, the EPA informed him it would be withdrawing the guidelines while it consulted further with industry. Mr McGowan denied the move would create more uncertainty for industry during the consultation period, or that he pressured Dr Hatton to make the move...

The environmental watchdog announced last Thursday that new and expanding mining and oil and gas projects would face much stricter scrutiny around their emissions. In addition to having to devise ways of avoiding or reducing emissions, proposals with emissions over 100,000 mt of CO₂ would have also been required to offset those emissions.

<https://www.abc.net.au/news/2019-03-14/epa-scraps-carbon-emissions-guidelines-for-wa-resources-projects/10901574>

ICAP Status Report 2019: Emissions Trading Worldwide, Mar 19 '19

ICAP has published its annual Status Report 2019 “Emissions Trading Worldwide”. Check out the report here: <https://icapcarbonaction.com/en/icap-status-report-2019>

The 2019 edition of the ICAP Status Report provides a comprehensive overview of the latest developments and design elements of all ETS in operation, scheduled and under consideration around the world. As in previous years, the Status Report features up-to-date factsheets alongside infographics that visualize key developments and characteristics of the systems. Furthermore, in-depth articles from policymakers and carbon market experts provide insights on the climate collaboration of California and Quebec, the dynamic approach to ETS in China, the ETS development process in Mexico and the evolution of Korea’s carbon market.

Further materials:

Executive Summaries available in English, and soon in Chinese and Spanish

Infographics

ICAP seeks to improve its report and its associated materials, so please share any feedback or comments you may have.

<http://carbon-pulse.com/71330/>

Carbon pricing options for international maritime emissions, Mar 19 '19

When considering how to implement a carbon price on shipping, a number of important questions need to be considered including the design of an MRV system, what should be the compliance entity, and how to enforce the measure. Further, any potential carbon pricing approach in the shipping sector needs to be measured based on four criteria: [1] its effectiveness; [2] its ability to comply with the International Maritime Organization’s [IMO] principles of non-discrimination and no more favourable treatment; [3] its ability to take impact on states and common but differentiated responsibilities and respective capabilities into consideration; and [4] its ability to minimise associated transaction costs and administrative burden. A carbon levy in the maritime sector is likely to be the most suitable instrument to address these challenges. Because ships built now will be in use for decades to come, the IMO should move quickly to consider and adopt a robust, well-designed carbon price in the next sessions of the IMO’s Marine Environmental Protection Committee.

<https://newclimate.org/2019/03/19/carbon-pricing-options-for-international-maritime-emissions/>

Australia

Newmont's Tanami gold mine to curb emissions by 20%, Mar 15 '19

Newmont Mining [NYSE:NEM] announced Friday that the \$245-million power station project for its Tanami gold mine in northern Australia had been completed.

The world's No.2 gold and copper producer, which has fully owned and operated the mine since 2002, said the project included the installation of two power stations, a 66 kV interconnected power line, and a 450 km natural gas pipeline.

Newmont says the completed upgrades will generate net cash savings of \$34 per ounce from 2019 to 2023. The additions are expected to provide Tanami with a safe and reliable energy source while lowering power costs and carbon emission by 20%. According to Newmont, the upgrades will generate net cash savings of \$34 per ounce from 2019 to 2023, delivering an internal rate of return of over 50%.

<http://www.mining.com/newmonts-tanami-gold-mine-curb-emissions-20-new-power-station/>

Brazil

US, Brazil could collaborate on nuclear reactors — Brazil energy minister, Mar 15 '19

The US and Brazil could work together to build small nuclear reactors, as South America's largest economy prepares to open uranium mining and related areas to foreign investment, Brazil's mines and energy minister told Reuters on Friday.

Brazil is preparing legislation that would clear the way for both private and foreign investment in prospecting and mining for uranium in the country, Minister Bento Albuquerque, said in an interview in Washington. There is already a draft of the legislation, but a final version must be negotiated with Congress, he said.

http://www.mining.com/web/u-s-brazil-collaborate-nuclear-reactors-brazil-energy-minister/?utm_source=digest-en-mining-190315&utm_medium=email&utm_campaign=digest

Japan

Energy Transition – This Time It May Be For Real, Bloomberg NEF, Mar 18 '19

...Japan's energy policy in the wake of the Fukushima nuclear disaster eight years ago has been offering a mixed bag of support for renewables but also

providing heavy, almost enthusiastic, support for conventional sources of energy such as oil, gas and coal. But signs of change have recently started to multiply, with big corporations such as Ricoh Co. and Sony Corp. — and even some of the country's biggest utilities and trading houses — beginning to embrace green energy enthusiastically.

BloombergNEF's 2018 New Energy Outlook, published last summer, captured the mixed noises, forecasting that Japan's electricity system will remain heavily reliant on fossil fuels, particularly coal, for at least the next three decades [client links web | terminal]. Nuclear is expected to make a comeback to some degree and renewables will see strong growth, but coal will become the dominant technology in the Japanese power system from 2023 onward, BNEF projected.

And while gas has become the biggest source of generation in the immediate aftermath of Fukushima — rising from 29 pct of the generation mix the year before Fukushima [2010], to 41 pct in 2017 — its gains are expected to be only temporary. To varying degrees, restarts will mean nuclear will account for anywhere from 21 pct of Japan's electricity mix by 2030 [the government's forecast] to a more modest 12 pct [BNEF's forecast].

<https://about.bnef.com/blog/wilson-japans-energy-transition-time-may-real/?elqTrackId=4dae71ea8c614c78954e6123791a3fd0&elq=c2d783817e0a4b77a2a5fd59c57cc08f&elqaid=17328&elqat=1&elqCampaignId=9377>

Russia

Coal and sustainability – connecting or clashing? Mar 14 '19

The Russian coal industry has been paying particular focus on social and environmental issues. Dr.rer.sos. Natalia Markova, University of St. Gallen, Switzerland, analyses the corporate social responsibility commitments of SUEK during 2013 – 2017

Russia is one of the world's leading producers and exporters of coal. In 2017, Russia ranked sixth among the coal producers after China, the US, India, Australia and Indonesia, and third in export value after Australia and Indonesia.1 Russian coal is exported to almost 80 countries, spanning four continents. Our daily lives, thus, are inseparable from Russian coal, which has been consumed through power generation, steel production, cement manufacturing and even used as a liquid fuel. Consumption of coal links us to miners, their communities and surrounding environments.

Customers' awareness about sustainability has risen rapidly for the last 15 years. It creates new demands on coal industries around the world. Many of these related companies have taken steps to address many spoken and unspoken social and environmental issues. Several sustainable initiatives have been launched over recent years, originating from bodies such as the World Coal Association, the Responsible Mining Index and Bettercoal. Like many others, leading

Russian coal companies claim to deal responsibly with people and the environment too, but is this really the case? Let's take a look at the companies' behaviour using the example of the number one coal producer and exporter in Russia – the Siberian Coal Energy Company [SUEK].

<http://static.worldcoal.com/media/content/russian-coal-and-sustainability.pdf>

Turkey

EkoRE breaks ground on 1 GW vertically integrated PV module factory, IENE, Mar 16 '19

Turkish renewables project developer Eko Yenilenebilir Enerjiler A.S. [EkoRE] has announced on its Twitter account it has begun construction of a solar module manufacturing facility in Niğde, in central Anatolia. The Turkish government included the scheme in its Project Based Investment Incentive System, a TRL2.2 billion [\$405 million] incentive scheme launched in August 2017 to drive investment.

Located at the Bor organized industrial zone, the factory will have an initial production capacity of 100 MW, with the opportunity to expand to 600-1,000 MW. With vertically integrated production of ingots, wafers, solar cells and PV modules at the site, EkoRE intends to complete construction within 12 months. As with other projects selected for the government incentive scheme, the factory was granted exemption from income tax and some permitting fees, including those for an environmental impact assessment and construction. The government scheme also provided infrastructure support, reduced electricity prices, and offered salary assistance and favorable financing.

...When built, the new factory will add to several module fabs operational in Turkey. Other facilities include, among others, Sunergy's 300 MW factory and a 600 MW cell and module fab commissioned by Chinese group HT-SAAE at the beginning of 2017, although the utilization capacities of such projects is unclear.

New Technology

Tin's bright electric future poses supply problem, Mar 7 '19

The electric vehicle [EV] revolution has galvanized battery metals such as lithium, cobalt and nickel - and now the tiny tin market is becoming aware that it, too, might be a beneficiary.

The International Tin Association [ITA] has just released a report on the use of tin in lithium-ion batteries. The headline takeaway is that this additional use beyond soldering and packaging could generate a demand surge of up to 60,000 mt a year by 2030. That may not sound like much, but it would represent a significant increase from last year's global usage of about 360,000 mt.

There could be more to come. A piece of research by the Massachusetts Institute of Technology [MIT] projected that tin could be the metal with most to gain, relative to market size, from a broader technology revolution that extends beyond EVs to robotics and the so-called internet of things by virtue of its use in soldering. It's likely to be a slow-burn story. Which is just as well because tin's current supply chain doesn't look capable of generating that much metal.

<https://www.reuters.com/article/us-metals-tin-at-home/tins-bright-electric-future-poses-supply-problem-andy-home-idUSKCN1QO21O>

Acceleware files patent to use RF technology to improve crude by rail, Mar 14 '19

Radio frequency oilsands technology developer Acceleware is branching out potential applications for its systems as it advances preparations for its in situ field pilot. Last year the company announced an agreement with Prosper Petroleum to test its RF XL technology at the producer's Rigel oilsands lease north of Fort McMurray.

Acceleware says that with partner Scovan Engineering it has completed the front-end engineering design for the surface facilities required for the test, while the company's drilling and completions consultants, including Codeco-Vanoco Engineering, have substantially completed designs for the proprietary RF XL heater wells, along with the industry standard producer wells.

The Alberta Energy Regulator is currently reviewing the project application, which was filed in October 2018. Acceleware believes that RF XL technology has the potential to save the industry billions by reducing both capital and operating costs, while offering major environmental benefits including GHG emissions and land use reductions, as well as no requirement for external water or solvents.

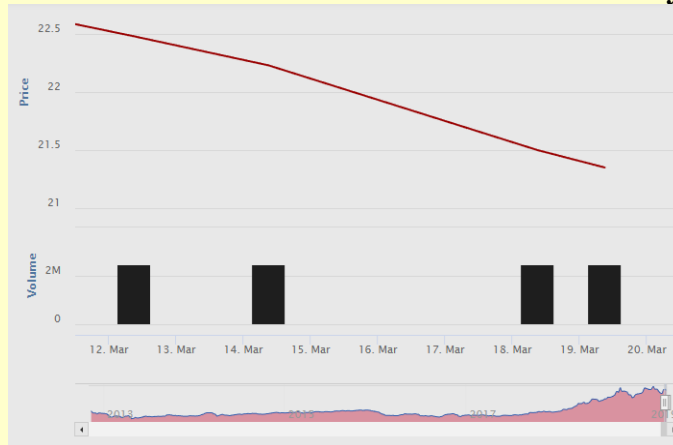
<https://www.jwnenergy.com/article/2019/3/acceleware-files-patent-use-rf-technology-crude-rail/>

EU Emissions allowances

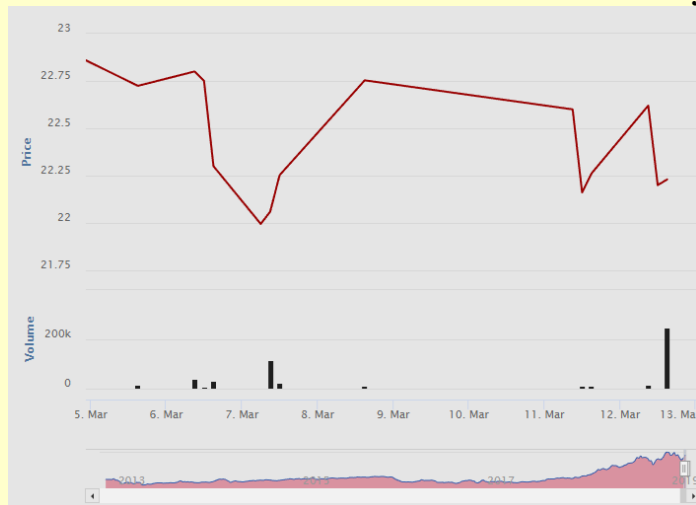
EUA primary market auction Mar 12-19 '19

Date	Contract	Median €/mtCO ₂	Auction volume mt CO ₂	Most active country
12/3/2019	EUA 3. Phase	22,51	2495000	IT: 8415460
13/3/2019	EUA 3. Phase	21,91	4428500	NA
13/3/2019	EUA 3. Phase	21,92	640000	SP: 2901360
14/3/2019	EUA 3. Phase	22,22	2495000	IT: 8491860
15/3/2019	EUA 3. Phase	22,63	3209000	NA
18/3/2019	EUA 3. Phase	21,42	2495000	IT: 8213000
19/3/2019	EUA 3. Phase	21,26	2495000	IT: 8155700

EU emissions allowances Mar 12-19 '19: Primary market auction



EU emissions allowances Mar 12-19 '19: Secondary market auction



Source: European Energy Exchange

