

EU failing to find consensus on IMF chief to succeed Lagarde



Paris: EU members have so far been unable to reach a consensus on a candidate to succeed Christine Lagarde as head of the International Monetary Fund and may yet need a vote to break the deadlock, officials said Thursday.

EU states had given themselves a deadline of the end of July to find a candidate to head the Washington-based global lender, which by tradition – but not rule – is led by a European.

But reflecting tensions all too familiar in Brussels, the process to replace Lagarde, who is to become head of the European Central Bank, has been mired in disputes between northern and southern EU member states.

“At this stage, although some candidates’ names gather more support than others, there is not yet a full consensus around one name,” said an official from France’s finance ministry, asking not to be identified by name.

French Finance Minister Bruno Le Maire, who is leading the talks on finding a European candidate, has spoken to “all his colleagues” over the last few days and in particular his German counterpart Olaf Scholz.

Sources say that five candidates are currently in contention – from southern Europe Spain’s Finance Minister Nadia Calvino and her Portuguese counterpart Mario Centeno, and from northern Europe, former Dutch finance minister Jeroen Dijsselbloem and Bank of Finland chief Olli Rehn.

The fifth candidate – from central Europe and a possible compromise figure – is Kristalina Georgieva, the current number two at the World Bank.

Southern EU states fear that Rehn and Dijsselbloem, who enjoys German backing, excessively favour economic austerity which risks harming growth.

Southern countries have particularly long memories of Dijsselbloem because of his tough stance against southern nations like Greece when he headed the group of EU finance ministers.

“I can’t spend all my money on drinks and women and then ask for help,” he said in one particularly notorious comment in 2017. But northern countries are also underwhelmed with the southern European candidates, with Calvino in particular seen as having insufficient experience.

“This situation shows the splits between the north and the south and the difficulties for the Europeans in agreeing on a solid candidate,” a source close to the talks told AFP.

The ECB's outgoing chief Mario Draghi said last week that he was "not available" for the position. At 71, he is too old to hold the post, according to IMF rules, which state that the managing director must be under 65 when appointed.

This leaves Georgieva – but the snag is that she will soon be 66, above the age limit of 65. "The other members of the fund will need to make an exception for her, and that it is not a given," one source said.

Adding to the uncertainty, Le Maire has allowed Britain, after its government shake-up last month, one more day to present a candidate, source said. This could allow a candidacy by Canadian-born Bank of England governor Mark Carney, who holds Canadian, British and Irish nationality.

Sources said a vote by ministers is a possible way to break the impasse, adding that Le Maire has raised this as an option. But this would also have the disadvantage of exposing to the world the inability of Europeans to unite around a single top-level candidate, the sources said.

The IMF says any of the fund's 189 members can nominate a candidate between July 29 and September 6, after which the board will announce its shortlist of up to three names. But with the US and Europe having the biggest voting blocs in the IMF, it would be difficult for an outside candidate to upset the tradition whereby they divvy up the IMF and World Bank jobs between them.

The convention has nonetheless come under strain in recent years, with developing economies demanding a greater say at the Washington-based institutions. US Treasury Secretary Steven Mnuchin emphasised at a meeting of G7 ministers last month that naming a European to head the IMF was a convention, "not an official policy".

Possible non-European candidates could include the general manager of the Bank of International Settlements and former

Bank of Mexico governor Agustin Carstens, and Lesetja Kganyago, the governor of the central bank of South Africa. The IMF plans to select its new leader by October 4.

France's EDF fined nearly 2 mn euros for not paying bills on time



Forgot to pay your bills? Don't worry. So did your electricity provider.

France's state state energy giant EDF has been fined 1.8 million euros (\$2 million) for not paying its bills on time, a record amount that aims to dissuade big businesses from starving small suppliers by putting off payment for as long as possible.

Junior economy minister Agnes Pannier-Runacher said Thursday

the government wanted to “hit companies in the wallet” to force a change in their thinking on paying bills, currently treated by many as “a minor administrative issue”.

France, like many European countries, has been getting tougher on late payers, blamed for sometimes bankrupting small companies by failing to settle their bills on time.

In 2016, the socialist government of then president Francois Hollande increased the maximum fine for late payments from 375,000 euros to 2 million euros.

President Emmanuel Macron has continued on the same track, pushing through a UK-inspired law that allows the government to publicly name and shame offenders for the first time.

Several big companies have been outed as late payers in recent months, including US online retail giant Amazon, China’s Huawei and France’s own cosmetics chain Sephora as well as the national postal service.

But the fine imposed on EDF dwarfs all previous sanctions, with the stiffest to date – 670,000 euros – going to a subsidiary of German industrial giant HeidelbergCement in May.

As further punishment for EDF, in which the state has a 83.7-percent stake, the company will also be stripped of a label it earned in 2015 for its “balanced relations” with suppliers.

The government audited over 130,000 bills received by the company between March and August 2017.

It found that 3,452 suppliers who sent bills totalling 38.4 million euros had not been paid on time.

EDF said Thursday that it had “taken note” of the fine and vowed to “continue reinforcing internal procedures...so that procedures allowing bills to be paid on time are understood and followed” by staff.

In France, companies have 30 days to pay their bills unless otherwise stated in the contract, which can give creditors up to 60 days to pay up.

But big groups regularly disregard the deadlines, with fewer than one in two settling their bills within 60 days, according to a 2018 report from the Banque de France's monitoring centre.

The centres blamed late payers for robbing small companies of 19 billion euros in cashflow.

The coming clash between climate and trade



By Jean Pisani-Ferry /Paris

The incoming president of the European Commission, Ursula von der Leyen, has laid out a highly ambitious climate agenda. In

her first 100 days in office, she intends to propose a European Green Deal, as well as legislation that would commit the European Union to becoming carbon neutral by 2050. Her immediate priority will be to step up efforts to reduce the EU's greenhouse-gas emissions, with the aggressive new goal of halving them (relative to 1990 levels) by 2030. The issue now is how to make this huge transition politically and economically sustainable.

Von der Leyen's programme reflects growing concern over climate change among European citizens. Even before the continent's recent heat wave, protests by high-school students and the surge in support for Green parties in the European Parliament election had been a wake-up call for politicians. Many now regard climate action not only as a responsibility to future generations, but also as a duty to today's youth. And political parties fear that dithering could lose them support among huge numbers of voters under 40.

In truth, however, the EU (including the United Kingdom) is a minor contributor to climate change these days. Member states' combined share of global CO₂ emissions has declined from 99% two centuries ago to less than 10% today (in annual, not cumulative terms). And this figure could fall to 5% by 2030 if the EU meets von der Leyen's emissions target by that date.

While the EU will undertake the painful task of cutting its annual emissions by 1.5bn tonnes, in 2030 the rest of the world will likely have increased them by 8.5bn tonnes. Average global temperatures will therefore continue to rise, possibly by 3C or more by 2100. Whatever Europe does will not save the planet.

How Europe deals with this frontrunner's curse will be critical. The von der Leyen plan will inevitably cost jobs, curtail wealth, reduce incomes, and restrict economic opportunities, at least initially. Without an EU strategy for turning the moral imperative of climate action into a trump card, it won't be tenable. A backlash will come, with ugly political consequences.

So what strategy might Europe adopt? One option is to bet on

leading by example. By building an environmentally friendly development model, Europe and other climate pioneers would establish a path for others to take. And non-binding international agreements such as the 2015 Paris climate agreement would help to monitor progress, thereby pushing laggard governments to act.

But because climate preservation is a classic public good, climate coalitions are inherently unstable – and larger ones create even more incentive for members to defect and free-ride on others' efforts. Leadership by example is thus unlikely to suffice.

Alternatively, Europe could build on its first-mover advantage to develop a competitive edge in new green technologies, products, and services. As Philippe Aghion and colleagues have argued, innovation can help tap the potential of such technologies and start changing the direction of economic development.

There are encouraging signs: the cost of solar panels has fallen faster than anticipated, and renewables are now more competitive than had been expected even ten years ago. Unfortunately, however, Europe has failed to convert climate action into industrial leadership. Most solar panels and electric batteries are produced in China, and the United States is its only serious competitor.

Europe's remaining card is the size of its market, which still accounts for some 25% of world consumption. Because no global firm can afford to ignore it, the EU is a major regulatory power in areas such as consumer safety and privacy. Moreover, European standards often gain wider currency, because manufacturers and service providers that have adapted to demanding EU requirements tend to adhere to them in other markets, too.

The EU's bet is that the combination of its own strong commitment to decarbonisation and the much softer, but global, Paris climate agreement will lead firms to redirect research and investment toward green technologies. Even if other countries do not set ambitious targets, the argument goes,

enough investment may be redirected to make green development more affordable for all countries.

Yet current progress in this regard is clearly insufficient to curb global emissions and keep the global increase in temperature this century well below 2C above pre-industrial levels, as the Paris agreement stipulates. For example, global coal-powered capacity is still growing, because China and India are building plants faster than the US and Europe are dismantling them.

Europe is therefore short of tools that could make its transition to carbon neutrality economically and politically sustainable. In her address to the European Parliament, von der Leyen dropped a bomb: she promised to introduce a border tax aimed at preventing “carbon leakage,” or the relocation of carbon-intensive production to countries outside the EU.

Such a tax will win applause from environmentalists, who (often wrongly) believe that trade is bad for the world’s climate. More important, the measure would both correct competitive distortions and deter those tempted to abstain from taking part in the global climate coalition. As long as there is no binding climate agreement, a carbon border tax makes economic sense.

Yet such a tax won’t fly easily. Committed free traders (or what remains of them) will cry foul. Importers will protest. Developing countries and the US (unless it changes course) will portray the measure as protectionist aggression. And an already crumbling global trade system will suffer a new shock. It is ironic that the new leaders of the EU, which has relentlessly championed open markets, will likely trigger a conflict between climate preservation and free trade. But this clash is unavoidable. How it is managed will determine both the fate of globalisation and that of the climate. – Project Syndicate

*Jean Pisani-Ferry, a professor at the Hertie School of Governance (Berlin) and Sciences Po (Paris), holds the Tommaso Padoa-Schioppa chair at the European University Institute and

is a senior fellow at Bruegel, a Brussels-based think tank.

The Dangerous Delusion of Optimal Global Warming



Aug 1, 2019 ADAIR TURNER

The Nobel laureate economist William Nordhaus believes that global warming should be limited to 3.5°C, which is much higher than the 2°C targeted by the Paris climate agreement. But Nordhaus's approach represents a misguided application of sophisticated modeling to decision-making under extreme uncertainty.

LONDON – The United Kingdom is now legally committed to reduce net greenhouse-gas emissions to zero by 2050. Opponents in Parliament argued for more cost-benefit analysis before making such a commitment; and Nobel laureate economist William Nordhaus argues that such analysis shows a much slower optimal pace of reduction.

The 2015 Paris climate agreement seeks to limit global warming to “well below 2°C” above preindustrial levels, while the Intergovernmental Panel on Climate Change recommended in 2018 that the increase be capped at 1.5°C. By contrast, Nordhaus’s model suggests limiting warming to 3.5°C by 2100. If that were the objective, net zero emissions would be acceptable far later than 2050.

But Nordhaus’s approach represents a misguided application of sophisticated modeling to decision-making under extreme uncertainty. All models depend on input assumptions, and Nordhaus’s conclusions rely crucially on assumptions about the additional harm of accepting 3.5°C rather than 2°C of global warming.

For some types of climate impact, quantitative estimates can be attempted. As the Earth warms, crop yields will increase in some colder parts of the world and decrease in hotter regions. Any estimate of the net economic impact is subject to wide margins of error, and it would be absurd to imagine that benefits in one region will be transferred to others that have been harmed, but at least modeling can help us to think through the possible scale of these effects.

But it is impossible to model many of the most important risks. Global warming will produce major changes in hydrological cycles, with both more extreme rainfall and longer more severe droughts. This will have severe adverse effects on agriculture and livelihoods in specific locations, but climate models cannot tell us in advance precisely where regional effects will be most severe. Adverse initial effects in turn could produce self-reinforcing political instability and large-scale attempted migration.

To pretend that we can model these first- and second-round effects with any precision is a delusion. Nor can empirical evidence from human history provide any useful guidance for how to cope with a world that warmed to Nordhaus’s supposedly

optimal level. After all, 3.5°C warming above preindustrial levels would take us to global temperatures not seen for over two million years, long before modern human beings had evolved.

Modeled estimates of adverse impacts are also incapable of capturing the risk that global warming could be self-reinforcing, creating a nontrivial risk of catastrophic threats to human life on Earth. Recent Arctic temperature trends confirm climate model predictions that warming will be greatest at high latitudes. If this produces large-scale melting of the permafrost, huge amounts of trapped methane gas will be released, causing climate change to accelerate. The higher the temperature attained, the greater the probability of rapid and uncontrollable further warming. Models always struggle to capture such strongly endogenous and non-linear effects, but Nordhaus's 3.5°C point of optimality could be a hugely unstable equilibrium.

Before the 2008 financial crisis many economists, including some Nobel laureates, believed that sophisticated "value at risk" (VaR) models had made the global financial system safer. Then-US Federal Reserve Chair Alan Greenspan was among them. In 2005, he reassuringly observed that the "application of more sophisticated approaches to measuring and managing risk" was one of the "key factors underpinning the greater resilience of our largest financial institutions."

But those models provided no warning at all of impending disaster. On the contrary, they deluded bank managers, central bankers, and regulators into the dangerous belief that risks could be precisely foreseen, measured, and managed. VaR models could not capture the danger of catastrophic collapse resulting from endogenous self-reinforcing feedback loops within a complex and potentially fragile system. The same is true of supposedly sophisticated models purporting to discern the optimal level of global warming.

The economic costs of achieving carbon neutrality by mid-century are also uncertain. But we can estimate their maximum order of magnitude with far greater confidence than is possible when assessing the costs of adverse effects of climate change.

Achieving a zero-carbon economy will require a massive increase in global electricity use, from today's 23,000 TW hours to as much as 90,000 TW hours by mid-century. Delivering this in a zero-carbon fashion will require enormous investments, but as the Energy Transitions Commission has shown, it is technically, physically, and economically feasible. Even if all those 90,000 TW hours were provided from solar resources, the total space requirement would be only 1% of Earth's land surface area. And in real-world competitive energy auctions, solar and wind providers are already committing to deliver electricity at prices close to and sometimes below the cost of fossil fuel generation.

Total cost estimates must also account for the energy storage or backup capacity needed to cover periods when the wind doesn't blow and the sun doesn't shine, and for the complex challenge of decarbonizing heavy industrial sectors, such as steel, cement, and petrochemicals.

Added up across all economic sectors, however, it's clear that the total cost of decarbonizing the global economy cannot possibly exceed 1-2% of world GDP. In fact, the actual costs will almost certainly be far lower, because most such estimates cautiously ignore the possibility of fundamental technological breakthroughs, and maintain conservative estimates of how long and how fast cost reductions in key technologies will occur. In 2010, the International Energy Agency projected a 70% fall in solar photovoltaic equipment costs by 2030. It happened by 2017.

Rather than relying on apparently sophisticated models, climate-change policy must reflect judgment amid uncertainty.

Current trends threaten major but inherently unpredictable adverse impacts. Limiting global warming to well below 2°C will cost at most 1-2% of GDP, and those costs will come down if strong commitments to reduce emissions unleash technological progress and learning-curve effects. Given these realities, zero by 2050 is an economically rational target.

Siemens Is Latest Casualty of European Manufacturing Slowdown



German industrial giant Siemens AG became the latest casualty of Europe's economic slowdown, warning a sharp deterioration in some markets hurt quarterly profit and has put financial goals at risk.

The shares dropped as much as 5.9% on Thursday, the most in more than three years, after the region's largest engineering

company reported a disappointing set of results, joining ArcelorMittal, Rheinmetall AG and BMW AG in providing evidence of the gathering storm.

The earnings are a sign that a deepening slump in the global car industry and a more general economic malaise are reaching further into corporate Europe. Until now, Siemens was able to rely on its digital industries division supplying factories with equipment to automate to make up for a protracted slump in the power and gas sector. In the latest quarter, even orders and sales at that unit dropped.

“It is difficult to reconcile owning Siemens for its world-class automation, software franchise when this is driving negative earnings,” Morgan Stanley analyst Ben Uglow wrote in a note.

Downbeat Figures

Manufacturing in the euro area shrank for a sixth month at the start of the third quarter, dragged down by Germany’s worst slump in seven years. The downbeat figures come in the wake of reports showing slower economic growth in France, Spain and the euro area, with Italy stagnating. While part of the weakness is linked to troubles in the automotive industry, a continued downturn could spell more trouble.

Behind the economic statistics, an increasing number of companies like Siemens are also sounding the alarm. The German company is in the midst of an overhaul and is already shedding thousands of jobs. During the latest reporting period, profit declined a worse-than-expected 12% and the company said a target for sales growth will be harder to reach and another for profit margin will be at the lower end of a range.

“The assumptions we made in the first two quarters about the economic and political environment are no longer true,” Siemens Chief Financial Officer Ralf Thomas said, adding that the auto sector won’t improve for at least three quarters.

“We’re taking countermeasures to secure our business’s profitability to the greatest extent possible.”

Chief Executive Officer Joe Kaeser has supervised a large-scale breakup of Siemens’s conglomerate structure, starting with a merger of the wind turbine division and a listing of the health-care division. The planned spinoff of the gas and power unit will be completed in 2020. The German executive also tried and failed to merge the train-making operation with that of rival Alstom SA. The move was partly motivated by the fate of rival conglomerate General Electric Co., which is showing signs of emerging from a troubled period.

Siemens’s new structure has greatly reduced the company’s need for people in central operations, where 2,500 job cuts are planned. In total, the company plans to cut more than 10,000 jobs, although Kaeser has said company also plans to hire about 20,000 in the same time.

India set to increase energy imports from US: Minister



Bloomberg/New Delhi

India will step up oil and gas imports from the US as the third-biggest oil consumer looks to diversify its supply sources and secure energy for its 1.3bn people.

“When we came to power in 2014, we were not taking any energy from the US and last financial year it was \$6bn,” India’s Oil Minister Dharmendra Pradhan said at the Bloomberg NEF Summit in New Delhi. “I’m saying with full responsibility, this is just the beginning and a lot more would be spent in the near future.”

Indian refineries started buying American oil after the US reversed a decades-old law that restricted exports of unrefined crude in late 2015. The processors imported 6.4mn tonnes of crude worth \$3.6bn from the US during the financial year 2018-19, according to data from India’s Directorate General of Commercial Intelligence and Statistics. Indian companies also have long-term contracts for purchasing liquefied natural gas from the US.

Some infrastructure constraints in the US Permian Basin are likely to be removed later this year, which will increase supply and may result in India being able to reduce its reliance on the Middle East, the head of Hindustan Petroleum

Corp, one of India's biggest state-run refiners, told Bloomberg last month. Middle Eastern producers supply every two barrels out of three that India imports to meet its crude requirement.

Higher energy purchases from the US will help correct the trade imbalance that President Donald Trump has spoken about. New Delhi's trade surplus with Washington fell sharply to \$17.12bn in the year ended March 31 from \$21.26bn a year ago, according to data from India's trade ministry.

India, which imports 85% of its oil requirements, is also seeking to harness other non-conventional energy sources such as bio-fuels to reduce exposure to oil price volatility, Pradhan said. The goal of becoming a \$5tn economy will boost the nation's energy demand, making it necessary to tap every source, he said. The government has introduced a new policy that encourages bio fuel production from non-food feedstock such as solid and industrial waste and biomass. "Utilising the surplus biomass capacity, India can replace 1% of oil-import dependency," the minister said.

LG Chem set to build 2nd US EV battery plant, say sources



Reuters/Seoul/Detroit

South Korean electric vehicle (EV) battery maker LG Chem is considering building a second US factory, three people familiar with the matter said, accelerating a race to add capacity to meet growing global demand for green vehicles.

LG Chem, one of the leading EV battery makers in the world that counts General Motors and Volkswagen among its customers, is weighing investing about 2tn won (\$1.70bn) in the plant that could begin production in 2022, one of the people said.

Kentucky and Tennessee are among the candidates for the plant's site, the person said.

A decision on the plant's site is expected to be made by the end of this month, another person said.

Automakers are pushing ahead with billions of dollars in investments in electric vehicles to meet global regulatory requirements.

A new plant by LG Chem would come as South Korean companies have stepped up US investments, moves that have been praised by US President Donald Trump.

LG Chem's new factory would primarily supply to Volvo, Fiat Chrysler Automobiles, and potentially to Hyundai Motor, GM and Volkswagen, one of the people said.

LG Chem, the most valuable company of the LG conglomerate, said in a statement issued to Reuters it is reviewing various ways to meet its global clients' orders, but there are no concrete plans at the moment.

The sources declined to be named as the plan is confidential. A second US plant would come amid a growing rivalry between LG Chem and crosstown rival SK Innovation, which recently broke ground on its \$1bn US EV battery plant to primarily supply to Volkswagen.

Earlier this year, LG Chem sued SK Innovation in the United States for alleged theft of trade secrets by hiring its former employees.

"We are currently pursuing another production base," LG Chem's new CEO Shin Hak Cheol told reporters this week, without elaborating on the country.

Electric vehicle sales are projected to reach 1.28mn vehicles by 2026 in the United States alone, compared with less than 200,000 in 2018, according to market researcher IHS Markit.

Trump praised US investments by SK, Lotte Group and other South Korean conglomerates and raised hopes that Korean companies will continue to expand in the US. "Thank you very much. Congratulations. It's a great job," he said during his meeting with South Korean business leaders in Seoul on June 30.

The participants included group holding company LG Corp's vice chairman Kwon Young Soo.

LG Chem, the battery supplier for GM's Bolt, currently operates an EV battery plant in Michigan.

LG Chem also has production bases in South Korea, China and Poland.

It drew attention during the groundbreaking of its first US production facility in 2010, when former president Barack Obama travelled to Michigan for the event. LG Chem is also being wooed by the government of South Korean President Moon Jae-in to build a new domestic factory to create jobs – one of Moon's top priorities.

CEO Shin said LG Chem is in talks to build a production

facility for cathode materials used in EV batteries in the southeastern city of Gumi in South Korea, but details have not been finalised.

Oil Tankers' Tracking Signals Are Vanishing in the Strait of Hormuz



Oil tanker owners are finding a way to reduce the risks of navigating the Strait of Hormuz, the world's most important – and lately most dangerous – energy chokepoint: vanish from global tracking systems.

Copying from Iran's own playbook, at least 20 ships turned off their transponders while passing through the strait this

month, tanker-tracking data compiled by Bloomberg show. Others appear to have slightly altered their routes once inside the Persian Gulf, sailing closer than usual to Saudi Arabia's coast en route to ports in Kuwait or Iraq.

Before the latest increase in tensions with Iran, ships were more consistent about signaling their positions as they passed through a waterway that handles a third of seaborne petroleum. Once inside the Gulf, shipping routes took them fairly close to the Iranian coast, skirting the offshore South Pars/North gas field shared by Iran and Qatar. Most still do, but a growing number appear to be trying something new.

It's little surprise that ships are doing everything possible to minimize risk. The Gulf region has witnessed a spate of vessel attacks, tanker seizures and drone shoot-downs since May, all against the backdrop of U.S. sanctions aimed at crippling Iran. War-risk insurance soared for tanker owners seeking to load cargoes in the region.

Two British warships are now situated in the waters around Hormuz where they were recently escorting the nation's ships. The U.S. 5th Fleet also permanently operates in the region. On Wednesday, the Norwegian Maritime Authority advised the country's flagged vessels to minimize transit time in Iran's territorial waters. Tanker captains have become increasingly nervous about the risks of getting caught up in the conflict.

See QuickTake on the Strait of Hormuz

At least 12 vessels loaded in Saudi Arabia and shut off their transponders while passing through the strait within the past month. They include the supertanker Kahla, which turned off its signal on July 20 before passing through the strait. It reappeared two days later on the other side of the waterway.

Likewise, at least eight vessels that loaded in Iraq and Kuwait went dark while leaving the Strait of Hormuz. A vessel shipping from the U.A.E. also dropped off tracking systems.

The apparent shutdown of signals coincides with a slew of disruptions in the region. On July 11, the Royal Navy intervened to prevent Iran from impeding a tanker operated by BP Plc from passing through Hormuz. Three days later, Iran seized a Panama-flagged vessel. On July 19, Iranian forces took control of a British-flagged tanker in retaliation for similar action by U.K. authorities. The vessel, the Stena Impero, remains impounded.

Climate Changed Turbines in Landfill Trigger Debate Over Wind's Dirty Downside



Wind turbines may be carbon-free, but they're not recyclable.

A photograph of dozens of giant turbine blades dumped into a Wyoming landfill touched off a debate Wednesday on Twitter about wind power's environmental drawbacks. The argument may be only beginning.

Fiberglass turbine blades – which in some cases are as long a football field – aren't easy to recycle. And with BloombergNEF expecting up to 2 gigawatts worth of turbines to be refitted this year and next, there could be heaps more headed for dumps.



A technician repairs a wind turbine blade in Adair, Iowa.

Photographer: Daniel Acker/Bloomberg

Cynthia Langston, solid waste division manager for the city of Casper, declined to say where the turbine debris came from. But she's happy to have it. The 1,000 blades will bring in about \$675,000 for the landfill, helping keep trash costs low for local residents. Plus, Langston said, wind-farm junk is less toxic than other garbage.

“It’s much cleaner than the contaminated soil and demolition projects from the oil and gas industry,” Langston said in an interview. “These are about as non-toxic as you can get.”

Wind turbine blades represent a “vanishingly small fraction” of overall waste in the U.S., according to the American Wind Energy Association.

Sachin Shah, chief executive officer of one of the world’s largest clean-power operators, Brookfield Renewable Partners LP, said “there will be an aggressive effort to re-use materials” in the years ahead.

US sanctions Iran’s Foreign Minister Mohammad Javad Zarif



The US Department of the Treasury has imposed sanctions against Iranian Foreign Minister Mohammad Javad Zarif.

The sanctions freeze any assets Mr Zarif may have in America, the department said.

“Javad Zarif implements the reckless agenda of Iran’s Supreme Leader (Ayatollah Ali Khamenei),” Treasury Secretary Steven Mnuchin said.

Mr Zarif tweeted the US had imposed sanctions on him because it considered him as a threat to its agenda.

- Iran-US tensions: What’s going on?
- US-Iran relations: A brief history
- Gulf crisis: Are we heading for a new tanker war?

Tensions between the US and Iran have heightened since the US last year withdrew from the 2015 nuclear deal that aimed to curb Iranian nuclear activities.

There are growing concerns that a number of recent incidents in the Gulf could lead to a military conflict in the vital shipping region.

On Wednesday, the US extended waivers which allow Russia, China and European countries to continue civilian nuclear cooperation with Iran.



Media caption Iran's Foreign Minister: We cannot leave our own neighbourhood

White House security adviser John Bolton said on Wednesday that it was a "short 90 day extension".

"I think the idea here is we are watching those nuclear activities very, very closely," he added.

What did the US say?

Mr Mnuchin described Mr Zarif as the Iranian "regime's primary spokesperson around the world".

"The United States is sending a clear message to the Iranian regime that its recent behaviour is completely unacceptable.

"At the same time the Iranian regime denies Iranian citizens' access to social media, Foreign Minister Javad Zarif spreads the regime's propaganda and disinformation around the world through these mediums," Mr Mnuchin said.

How did Mr Zarif respond?

Mr Zarif said the US move “has no effect on me or my family, as I have no property or interest outside of Iran”.



“The US reason for designating me is that I am Iran’s ‘primary spokesperson around the world. Is the truth really that painful?” he asked.

“Thank you for considering me such a huge threat to your agenda.”

What about the 2015 nuclear deal?

Last year, the US unilaterally withdrew from the agreement between Iran and world powers.

Washington has since reimposed tight sanctions affecting the Iranian economy, and also

The other parties of the 2015 deal – China, France, Germany Russia and the UK – criticised Mr Trump’s decision and said they remained fully committed to the deal.



Media caption Inside Iran: Iranians on Trump and the nuclear deal

Iran responded by breaching the limit on its stockpile of low-enriched uranium set under the nuclear deal.

Tehran stepped up production of enriched uranium, used to make reactor fuel but also potentially nuclear bombs, in May.

- Is the Iran nuclear deal finally dead?
- Why do the limits on uranium enrichment matter?
- Iran nuclear crisis in 300 words
- Iran nuclear deal: Key details

Last week, talks were held in Vienna to try to save the nuclear deal.

After meeting representatives from Britain, France, Germany, Russia and China, a senior Iranian official said the atmosphere had been “constructive”.

And what about recent tanker

incidents?

Tensions between the UK and Iran rose in July after British forces seized the Iranian tanker, Grace 1, off Gibraltar. It was alleged to be carrying oil to Syria in breach of EU sanctions, a claim denied by Iran.



Media captionFootage released by Iran's Revolutionary Guard-affiliated Fars news agency appears to show Stena Impero being seized

Several days later the British-flagged Stena Impero was impounded by Iran, which said it had been "violating international maritime rules".

Britain sent a second warship on Sunday to escort its ships sailing through the Strait of Hormuz.