Tears flow as politicians fail to dispel 'climate darkness'



Standing before a captive audience at this month's climate change conference in Madrid after entertaining them with a dance in her traditional Pacific island costume, 21-year-old Tabita Kaitamakin Awira Awerika's smile turned to angry tears. The student from Kiribati spoke of her anguish at the threat to her low-lying atoll nation from rising sea levels and ferocious storms — and the determination of her people not to let global warming chase them from their "beloved motherland". "I am very sad to say that as the youth of many developed nations are enjoying their daily activities, our fellow youth in Kiribati are worrying about what the future holds for us," she told an event on the sidelines of the UN talks.

"My leaders have voiced these concerns to the global community over and over but no one is listening — are we that insignificant for our cries to fall on deaf ears?" Emotional exhortations like this are being heard more often at the annual climate summit, especially from young people, as

climate change fuels extreme weather, glaciers melt, and the world's oceans creep inexorably higher.

In Madrid, veterans of the "COP" meetings — known as a place where suited officials spar over complex agreements — said they had never seen such an outpouring of grief, anxiety and sorrow.

Bill Hare, founder of climate science think-tank Climate Analytics, told US news show "Democracy Now!" he had seen more tears in Madrid than at the previous 24 summits, dubbing it "the crying COP".

Representatives of small island states were "almost panicking" at the prospect of their homelands disappearing under the waves, while young people were "angry and upset" at a lack of action by politicians, he said.

During two fractious weeks of talks, a handful of major polluting states resisted pressure to ramp up efforts to combat climate change, angering smaller countries and a growing protest movement that is pushing for emergency action.

The climate change talks have experienced a "big shift" away from formality in recent years, said Ashlee Cunsolo, director of the Newfoundland-based Labrador Institute of Memorial University and an expert on "ecological grief".

Tuvalu negotiator Ian Fry grabbed the world's attention at the 2009 Copenhagen talks by saying he had woken up crying, telling delegates tearfully, "the fate of my country rests in your hands".

At the 2013 talks, Philippines negotiator Yeb Sano made headlines when he broke down speaking of the destruction wrought on his country by Typhoon Haiyan.

Cunsolo told the Thomson Reuters Foundation people were increasingly "refusing to separate science and feeling".

"More and more, they are not embarrassed and not ashamed to share the emotions they are experiencing around these changes," she said.

One key driver is rising exposure to climate and weatherlinked disasters, whether Australia's bushfires, flooding in the United States or Hurricane Dorian in the Bahamas, she added.

And then there are communities experiencing longer-term deterioration in their native environments, including Canada's Inuit, who are struggling with losing the ice and what that means for their hunting-based lifestyle and food security.

"The lived experience that people have and are sharing publicly on social media and in media articles has so far outstripped the research that we have," said the academic who co-authored a study on the subject, published in April 2018.

The paper identified "ecological grief" as "an underdeveloped area of inquiry" and warned it could "become more common as climate impacts worsen".

Yet while community groups have sprung up to help people cope with their feelings, and some health professionals are developing guidelines on mental health and climate change, efforts to quantify and tackle the phenomenon are lagging behind, Cunsolo and others said.

"If people don't hear about it, and don't talk about it, and it only grows within, then that is a recipe for disaster," said Pablo Suarez, associate director for research and innovation at the Red Cross Red Crescent Climate Centre.

At a parallel event in Madrid, he ran a workshop introducing development professionals to the concept of "climate darkness" — a term he prefers to "grief" which points to something that has already happened and is not a springboard for action, he said.

"A little bit of light can undo darkness," he said. "Emotional pain is a signal: these tough times are full of opportunities for heroic generosity and proactive humanitarian deeds."

As a global network of volunteers, the Red Cross is aware of the stress climate-related crises put on its humanitarian workers, as well as those directly affected, and plans to start providing better psychological support for them, Suarez said.

Cunsolo, meanwhile, said she and colleagues want to conduct a national survey across Canada next year, with a focus on vulnerable groups like farmers and indigenous people, with the aim of producing data that can be useful to decision makers.

In drought and fire-hit Australia, researchers are planning a similar effort, she noted.

Suarez, who has devised games and worked with cartoonists to help people understand climate risk, said one reason why major climate change events like the COP fell short of public expectations was that they are "devoid of inspiration".

"Why are COPs designed to discard the emotional richness needed to make us aim for more? Yes, climate negotiations are deadly serious, but they shouldn't be deadly tedious," he added, calling for an injection of art and humour.

In the absence of a collective push to act, however, the prospect of a ruined planet can lead to sadness and paralysis, he noted.

In Madrid, Marie Christina Kolo, a young eco-feminist from Madagascar, welled up as she spoke of village girls being pushed into early marriage because their parents could no longer earn enough from fishing in the African island nation's warming seas.

"I hope (the negotiators) will not only consider data and percentages, but they will consider our lives," she told journalists. — Thomson Reuters Foundation

CEOs in Davos say they can't save the planet on their own



INTERNATIONAL — As the financial industry comes under pressure to avoid funding dirty energy, the heads of Citigroup Inc. and Zurich Insurance Group AG said they need their clients to do more work too.

"I say to our clients, 'I don't want to be the sharp end of the spear,'" enforcing industry standards, Michael Corbat, chief executive officer of the New York-based bank, said Tuesday in a panel discussion at the World Economic Forum in Davos, Switzerland. "You should set those, you get proper buyin and we will be here to support you."

Mario Greco, the CEO of Zurich Insurance, agreed with Corbat that carbon was mispriced, and said insurance firms are having a tough time deciding what to underwrite as a result.

Insurers are underwriting "based on ethical standards," and "compliance with the Paris agreement, but it's not fast enough and it's a tough job," Greco said. "We don't know exactly" how an industry should restructure itself, "and we are not supposed to do that, so the only thing we can do is stop funding. Stopping funding is a brutal reaction to market displacement."

This year's meeting of the global business elite in Davos has focused on sustainability, with teenage activist Greta Thunberg criticizing a lack of action on climate during her appearance.

Financial companies are under pressure to retreat from funding industries including coal-fired power, and the European Union is working on a so-called taxonomy governing sustainable investments. Lawrence Fink, who runs BlackRock Inc., last week pledged to incorporate environmental concerns into the asset manager's investment process for both active and passive products.

"We are very much aligned" with Fink, Corbat said in Davos on Tuesday. "Where we don't want to find ourselves is being the person that starts to dictate winners and losers."

Corbat created the new role of chief sustainability officer at his bank in September. He said then that governments should create incentives for companies to adopt sustainable practices, rather than relying on punishments like carbon tariffs.

Greco was pessimistic that there will be more effective global agreements on matters like carbon pricing, calling the prospect "almost unthinkable."

Global companies "will go wherever there is the best financial opportunity short-term for them, and they will follow what prices tell them to do. This is what makes me scared, or pessimistic, that we will achieve the right speed."

You've done nothing on climate change: Thunberg tells Davos



Greta Thunberg brought a stark message to the business elite gathering in Davos: Everybody is talking about climate change, but nobody is doing anything.

Her appearance at the opening of the World Economic Forum was a striking sign that the debate about how to stop the Earth warming has become mainstream in business circles. Yet only a handful of executives from the oil, gas and coal industries that are chiefly responsible for warming the planet were seen attending the panel at which Thunberg spoke on Tuesday.

Meanwhile, U.S. President Donald Trump used his speech at the event to tout the benefits of soaring American oil and gas production and make a thinly veiled attack on those who warn about looming environmental catastrophe.

"The climate and environment is a hot topic right now, thanks to young people pushing," 17-year-old Thunberg said at the Swiss ski resort, where about 3,000 business and political leaders gather each year. "Pretty much nothing has been done, since the global emissions of CO2 have not reduced."

The Swedish activist's words came as the World Economic Forum sounds alarm bells on climate change. This year and for the

first time on record, environmental risks occupy the group's top five long-term concerns, while corporate executives say they're increasingly concerned about environmental issues. But young activists at Davos said none of this is enough.

Thunberg is giving relevance to the Davos gathering, which for years has suffered from criticism that it was largely a billionaires' playground where the rich debated among themselves without hearing outside voices. On Tuesday, there was a full room at this first 8:30 a.m. panel featuring young activists — something relatively unusual for a climate change event at Davos.

The debate on climate change is forcing businesses to respond to demands to stop carbon dioxide and other greenhouse gas emissions. While some have been slow in embracing the fight, executives at Davos highlighted that the overall views from within the business community have dramatically changed over the last decade or so, moving from denial and questioning science into complete acceptance.

"I have come to Davos for well over a decade and I see behind the scenes, among top executives, a huge change in perception of the risk of climate change," said Marco Dunand, the head of Mercuria Energy Trading SA, one of the worlds' largest oil traders. "It's not just talk: it's translating into billions of dollars in investments in the energy transition."

Activists' language has made its way to boardrooms across the world too. At another morning panel at Davos, Iberdrola SA Chief Executive Officer Ignacio Galan called on companies to close coal-powered plants in order to curb emissions.

"We are in a hurry, we have to move fast," he said. "There is already money available, cheap money, cheap technology, competitive technology and political decision in many countries to do so. Let's not continue delaying and

Trump Encounter

Trump landed at Davos on Tuesday morning and was welcomed by the words "Act on climate," carved into the snow on a hill near the helicopter landing zone. He didn't mention the topic in his speech at the forum later in the day, focusing instead on America's growing economy and record oil and gas production.

"This is not a time for pessimism, this is a time for optimism," Trump said as Thunberg watched from the audience. "We must reject the perennial prophets of doom and their predictions of the apocalypse. They are the heirs of yesterday's foolish fortune tellers."

The President and the activist's first and only meeting last year became instantly viral as Thunberg was filmed furiously staring at Trump. While they've never spoken face to face, they both seem to follow each other closely on Twitter.

"Greta must work on her anger management problem, then go to a good old fashioned movie with a friend! Chill Greta, Chill!", Trump tweeted in December shortly after the activist was named person of the year by Time magazine. Thunberg didn't directly answer, but changed her Twitter biography to "A teenager working on her anger management problem."

Three-day March

Hundreds of climate activists are due to arrive at Davos on foot on Tuesday following a three-day march across the Swiss Alps. Protesters will gather at the ski resort and stage a demonstration calling for the end of the World Economic Forum. Companies attending Davos for the past five decades bear a great responsibility for today's climate crisis, activists say.

"We are tired of empty promises. But we have hopes," said Puerto Rican activist Salvador Gomez-Colon. "We're not waiting years to see the change that we want to see."

Thunberg urged businesses, governments and the media to listen to scientists. She cited research by the Intergovernmental Panel on Climate Change from 2018 that concluded that the carbon budget— the amount that can be released while still keeping global warming limited to a specific level — stands at 340 gigatons of carbon dioxide and that, at current emission levels it will be gone in less than eight years.

"Since last summer I have been repeating these numbers over and over again in every speech," she said. "I know you don't want to talk about this. I assure you I will continue to repeat these numbers until you do."

With assistance by Jeremy Hodges

Climate change and gender top aid agencies' 2020 to-do list



We asked 10 organisations which two key issues they would focus on in the coming year

By Emma Batha

LONDON, Dec 30 (Thomson Reuters Foundation) — Tackling climate change and addressing violence against women and girls will be among aid agencies' top priorities for 2020, they told the Thomson Reuters Foundation.

We asked 10 organisations which two key issues they would focus on in the coming year.

CARE INTERNATIONAL — Natasha Lewis, senior advocacy & policy advisor

- We'll work with communities to address the climate crisis, as it's the biggest challenge facing us today. We'll focus on supporting women in particular, as they're often responsible for farming their fields, collecting water and feeding families meaning they're increasingly affected by more extreme droughts or floods.
- We'll champion the crucial role women play as first responders in humanitarian emergencies. We'll advocate

alongside local women's rights organisations, so they are heard by decision-makers at a global level.

U.N. WORLD FOOD PROGRAMME - Corinne Woods, director of communications

- Work with our partners to help those caught up in conflict and struggling on the frontlines of the climate crisis war and climate shocks now account for the world's eight worst food crises.
- Build a global coalition promoting initiatives such as school feeding so as to unleash the full potential of 73 million vulnerable children in 60 countries by 2030. It's estimated every dollar invested in school feeding brings a \$3-10 return from improved health and education among schoolchildren and increased productivity when they become adults.

INTERNATIONAL RESCUE COMMITTEE - Laura Kyrke-Smith, IRC UK
executive director

- Women and girls are often left behind in the context of crises. In 2020, the international community must redouble its efforts to prevent and respond to violence against women and girls.
- Resolving the conflict in Yemen has never been more urgent. At the current rate of decline, it will take 20 years to return Yemen to pre-crisis levels of child hunger. Now is the time to seize this opportunity for peace.

CHRISTIAN AID — Patrick Watt, director of policy

- Our key focus will be on climate justice because it's those people living in poverty who are on the frontline of the climate crisis. We want to raise our voices to create lasting change for those who need it most.
- We'll also be working on economic justice because our current economic system is broken. This is driving

inequality, poverty and climate breakdown at a time when progress is slipping towards the 2030 goal of ending extreme poverty.

INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES — Elhadj As Sy, IFRC secretary general

- •Millions of people around the world are already suffering the humanitarian consequences of climate change. Our priority will be helping communities find innovative, low-cost, and sustainable adaptation and risk reduction measures to the impacts of climate change.
- We will also scale up and ensure early mental health and psychosocial support in humanitarian crises. Mental health and psychosocial support during humanitarian crises can make the difference between life and death.
- U.N. FOOD AND AGRICULTURE ORGANIZATION Dominique Burgeon, director of emergencies
 - Scale up our efforts to engage with agriculture-reliant communities and boost their resilience before shocks like droughts or floods hit, via our "Early Warning for Early Action" initiative. This can prevent a shock from becoming a crisis and is far more cost-efficient than post disaster relief.
 - Respond rapidly in emergency situations from the earliest days of a disaster or crisis to help impacted rural farming families stay or get back on their feet and producing food, straight away. Even in crises contexts, it's possible to do this, and doing so makes a real difference.

ACTIONAID UK - Girish Menon, chief executive

• All too often, there's no justice for women and girls affected by violence so we'll campaign to fix broken justice systems that protect abusers and punish women.

As we continue to see rollbacks in women's rights, we will keep calling out gender inequality and violence.

• We'll work harder to promote women's leadership in communities facing humanitarian crisis. Experience shows us that their influence leads both to better immediate responses and to longer term impact.

OXFAM GB - Danny Sriskandarajah, chief executive

- The climate emergency is pushing millions or people deeper into hunger and poverty, with more than 52 million across 18 African countries facing hunger due to extreme weather. 2020 will be a pivotal year for countries to agree carbon emissions reductions and secure funding to help poorer nations cope.
- Next year marks five years since the escalation in the Yemen conflict. We'll continue to provide assistance to millions without food, clean water and health care, as well as challenging international arms sales to members of the Saudi-led coalition.

PLAN INTERNATIONAL — Sean Maguire, executive director of influencing

- A key focus in 2020 is supporting global grassroots youth activism for gender equality through Girls Get Equal. Through this campaign, we aim to continue helping young people smash the stereotypes that hold girls back.
- Our other key focus is on tackling the unique needs of girls in crisis situations, whether this is the safety and educational needs of girls in refugee camps, as part of displaced groups or due to drought, for example in Eastern Africa.

CATHOLIC RELIEF SERVICES — Sean Callahan, president and CEO

Climate change is causing land degradation and flooding.
 We are working on land restoration, which can help mitigate climate change impacts for farmers and coastal

- communities, but it needs to be done quickly and at scale.
- Another priority is responding to the crisis in Central America where people have become increasingly vulnerable and unable to feed their families. We foresee drought conditions, in addition to tremendous violence, continuing to force many to make the dangerous trip northward.

World on course to burn more coal, threatening climate goals



Coal consumption is set to rise in the coming years as growing demand for electricity in developing countries outpaces a shift to cleaner sources of electricity in industrialised nations. While use of the most polluting fossil fuel had a

historic dip in 2019, the International Energy Agency anticipates steady increases in the next five years. That means the world will face a significant challenge in meeting pledges to reduce greenhouse gas emissions that cause global warming. "There are few signs of change," the agency wrote in its annual coal report released in Paris yesterday. "Despite all the policy changes and announcements, our forecast is very similar to those we have made over the past few years." While this year is on track for biggest decline ever for coal power, that's mostly due to high growth in hydroelectricity and relatively low electricity demand in India and China, said Carlos Fernandez Alvarez, senior energy analyst at the Parisbased IEA. Despite the drop, global coal consumption is likely to rise over the coming years, driven by demand in India, China and Southeast Asia. Power generation from coal rose almost 2% in 2018 to reach an all-time high, remaining the world's largest source of electricity. The steady outlook for coal comes in spite of waning demand in industrialised nations. Europe has set a goal of zeroing out carbon pollution by the middle of the century, which would mean drastic reductions for coal. In the US, competition from natural gas has cut into demand for coal, despite President Donald Trump's vows to revive the industry. The story is diff erent in Asia, which will more than make up for reductions elsewhere. India, with a population of more than 1.3bn, will see coal generation increase by 4.6% a year through 2024 to help power its growing economy. In Southeast Asia, coal demand will grow more than 5% annually. China, which accounts for almost half the world's consumption, will also have modest growth with usage peaking in 2022. "How we address this issue in Asia is critical for the long-term success of any global eff orts to reduce emissions," Fatih Birol, the IEA's executive director, wrote in a foreword to the report. Any new coal plants added to meet the growing power demand in these countries will likely be in use for decades. Even as China's coal consumption slows and then declines after 2022, emissions from the fuel would need to rapidly decline in order to meet climate targets. Under

current policies, the world is set to warm almost 3 degrees Celsius (5.4 degrees Fahrenheit) by the end of the century. That's double the rate scientists say is needed to constrain the worst impacts of climate change. To prevent those increases, it would be necessary to use technology that captures and stores carbon as it's emitted from power plants, the IEA said. While the technology is expensive and untested at scale. But with coal here to stay, it may be the only option to reduce emissions.

GECF highlights challenges posed by climate change at COP25



Gas Exporting Countries Forum (GECF) secretary-general Dr Yury Sentyurin spoke at the UN Climate Change Conference (COP25) that concluded in Madrid recently.

Addressing the participants, the GECF official reaffirmed the crucial importance of challenges posed by climate change, alongside with the shared values and joint efforts undertaken by the international community to deal with the environmental issues.

Speaking on behalf of the organisation's member countries — 19 major natural gas producers, Sentyurin emphasised that the natural gas industry looks seriously to technology options

that can further promote decarbonisation potential of natural gas, including carbon capture, utilisation and sequestration options, and production of hydrogen from natural gas.

This adds to other progress in efficiency and digitalisation that enables a substantial reduction of greenhouse gases emissions along the entire supply chain.

Furthermore, the current expansion and technology progress of natural gas vehicles (NGVs) across the world offers a valuable opportunity to reduce emissions in the transportation sector.

GECF's strong belief in the role of constructive international co-operation as a driver for effective global responses to climate change and sustainable development was specifically highlighted by the speaker.

Meanwhile, the professional community's main concern is that in the era of energy transitions, introduction of discriminatory regulation against cleaner hydrocarbon fuels such as natural gas, disturbs overall gas markets design, undermines investment in critical gas transport infrastructure and new gas supply projects. Natural gas is a balanced solution that contributes substantially to reducing carbon intensity and pollution resulting from energy-related activities, supports access to modern energy, improves availability of supply, and provides affordable energy.

The "blue fuel" can also be a vector of increased co-operation and technology transfer between energy stakeholders. These credentials have been explicitly recognised in the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth in Japan early this year.

The GECF engagement in the UNFCCC as an observer organisation marks the willingness to contribute to scale up the Member Countries' collective actions in order to reduce the environmental footprint of natural gas.

In this context, the GECF has initiated the Environmental Actions Framework that aims to create a supportive platform allowing Member Countries to share best practices dealing with the environmental challenges, building capabilities and establishing progressive research collaborations on various

environment-related topics. This commitment is largely anchored in the GECF Heads of State Declarations including the recent one adopted in Malabo, Equatorial Guinea and the Organisation's Long-Term Strategy.

In line with this environmental ambition, the GECF has reinforced its co-operation with various organisations to strengthen its research activity, exchange expertise and develop studies related to the interactions between energy and our environment.

Study outcomes are to be translated into concrete recommendations on energy policy actions for the GECF Member Countries.

At the same time, the recently established GECF Gas Research Institute is set to become a pivotal project for the organisation with the aim to develop technical knowledge and innovative technologies that reduce GHGs emissions.

Qatar to sequester 7mn tonnes of CO2 by 2027, says al-Kaabi



Looking to advance efforts on sustainable development and the protection of the environment, Qatar is expected to increase its CO2 sequestration to 7mn tonnes by 2027, HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi said yesterday.

Al-Kaabi, who is also the president and CEO of Qatar Petroleum

(QP), made the statement during the panel session titled 'The Future of LNG in Meeting the World's Energy Demand' at the Doha Forum, which concludes today (December 15). Joining the minister during the panel discussion are ENI CEO Claudio Descalzi and Total chairman and CEO Patrick Pouyanné.

According to al-Kaabi, Qatar had started to sequester 2.5mn tonnes of CO2 this year, which is expected to reach 5mn tonnes by 2024. He stressed that many companies in the oil and gas sector "are trying to reduce" CO2 emissions and "looking at the environment more critically."

"In the oil and gas industry, we take responsibility in what we do with carbon capture, storage, and looking at the environment in general. In Qatar, we've announced that we've started this year's 2.5mn tonnes of CO2 sequestration.

"In addition to that, with the expansion that we have announced earlier, by 2024 we will reach 5mn tonnes, and maybe for the first time, I can announce that we are going to reach about 7mn tonnes by 2027," al-Kaabi said.

"We have a responsibility to do more and I think most of the companies are being responsible, but for humanity, you need more energy and there are going to be developments that are required, otherwise, you can't have developments because renewables alone cannot keep up with the growth requirements," he continued.

Commenting on the future of LNG and its impact on the environment, al-Kaabi said Qatar looks at gas "as a destination fuel rather than a transition fuel."

"I definitely think that renewable energy is going to be part of the solution...there are a lot of countries that are moving away from coal in favour of natural gas, while some are abandoning nuclear energy for various reasons, so we see gas as the future," he pointed out.

The minister also said Qatar is looking at Asian countries, citing upcoming peak demand from countries, such as China and India, as well as the development of countries in Southeast Asia.

"We are increasing our production capacity; currently, we are

producing 77mn tonnes per year (tpy). We already announced that we will reach 110mn tpy by 2024. Recently, we announced a further development, taking production capacity to 126mn tpy by 2027.

"We think there is a requirement for gas in the future; peak demand is coming from a lot of growing economies, such as China, India, which are the largest growth areas. Demand is also being driven by countries in Southeast Asia due to various infrastructure development projects," al-Kaabi said. He added: "Asia is our focus area; considering its sheer population, it is the biggest growth area. As for developed nations, mostly in Europe, we supply the entire continent, particularly those that use LNG. It is a big market and we don't see ourselves in competition with anybody, but rather we focus on what we control, which is our cost…we want to be efficient, safe, and reliable."

A new hope for US climate action



The United Nations Climate Change Conference (COP25) currently taking place in Madrid is supposed to prepare the ground for more ambitious national climate commitments. Nowhere is this more important than in the country where national leadership on climate change is least likely: the United States.

But a new report should give the world hope that it's not too late to keep the U.S. on a path in line with global aspirations to avoid the most catastrophic effects of climate change. This will require continued leadership from American states, cities and businesses that are already stepping up, combined with reinvigorated action from the federal government.

The U.S. is the world's second-largest emitter of greenhouse gases, and was the largest overall emitter for decades. Although China surpassed it in 2006, America's cumulative emissions remain unmatched. And yet, far from leading the way on climate action, the U.S. under President Donald Trump's administration has rolled back many federal climate and environmental rules and formally indicated its intention to withdraw from the 2015 Paris climate agreement by late next year.

Fortunately, the rest of the U.S. is not following Trump's lead. Across the country, a massive coalition of states, cities, businesses, universities, and others have declared that "We Are Still In." Despite the federal government's official withdrawal from the Paris agreement, they will take the necessary steps to fulfill America's climate commitments.

This is no pie-in-the-sky declaration. The coalition's more than 3,800 participants (and counting) include states, cities, and counties that account for 65 percent of the U.S. population, nearly 70 percent of U.S. GDP equivalent to an economy larger than China's and over half of U.S. emissions. For example, 145 U.S. cities have committed to 100 percent clean electricity, and six have already achieved it.

But serious questions remain. How much progress can this coalition make to reduce emissions without the federal government's support? And how much better would the situation be if the U.S. administration and Congress recommit to climate action?

These are the questions that America's Pledge, a Bloomberg Philanthropies initiative, has been working to answer over the last year.

The conclusions are both reassuring and daunting. According to the initiative's just-released third report, "Accelerating America's Pledge" (produced in collaboration with the Rocky Mountain Institute, the University of Maryland and the World Resources Institute), stronger action by states, cities and businesses could reduce U.S. greenhouse-gas emissions by 37 percent (compared to 2005 levels) by 2030.

In other words, even without the federal government, the U.S. can drastically reduce emissions, improve air quality and stimulate broad-based economic gains. Success would require an expanded coalition of non-federal actors to move quickly and ambitiously to transform energy and transportation systems,

including by building on the innovative measures that U.S. states, cities and businesses are already taking.

The impact of such a movement promises to extend beyond U.S. borders, with bottom-up commitments in the country leveraged to increase climate ambition around the world. This is already starting to happen. For example, Alliances for Climate Action connects cities, states, the private sector, investors, universities and civil-society organizations in Argentina, Japan, Mexico, South Africa, the U.S. and Vietnam, so that they can work with one another and with their national governments to spur climate action.

But the role of the national government remains important. Despite the potential of bottom-up climate leadership, the fact remains that the results are much better when combined with top-down coordination and oversight. The America's Pledge report shows that aggressive U.S. federal re-engagement on climate action in the form of a comprehensive "all-in" strategy could reduce emissions by 49 percent by 2030, putting the country on track to reach net-zero emissions by mid-century.

So, despite three years of federal indifference, all hope for effective climate action in the U.S. is not lost. But we cannot afford to rest easy. The needed transformation will require broad citizen mobilization, increased energy productivity, disruptive innovation, updated market structures and forward-thinking investment. The U.S. Congress and executive branch must take aggressive, quick action, placing climate change and the associated economic transformation at the top of the policy agenda.

The rewards would be tremendous. Beyond environmental benefits, the changes outlined in the America's Pledge report, if designed well and implemented efficiently, could boost prosperity, lower consumer costs and improve public health. By 2030, the economic transformation could deliver equal or

better performance in electricity, vehicles, and buildings compared to fossil-fuel technologies and at a lower price.

For example, it is already cheaper to shut down coal-fired power plants and replace them with wind and solar than it is to keep the plants online. In addition, the transition will create new job opportunities and the careers of the future, including in renewable energy, electric vehicle manufacturing and sustainable forestry (among others). Recent analysis by the Global Commission on the Economy and Climate shows that smart climate action can create global economic gains of \$26 trillion by 2030, as well as generating 65 million jobs.

Non-federal U.S. actors have laid a strong foundation for climate action, and they continue to drive progress. But to achieve the necessary transformation as quickly as required, more elected U.S. officials and national leaders will need to step up.

Jules Kortenhorst is CEO of the Rocky Mountain Institute. Andrew Steer is president and CEO of the World Resources Institute. THE DAILY STAR publishes this commentary in collaboration with Project Syndicate © (www.project-syndicate.org)

Time for adaptation to climate change



As world leaders gather in Madrid for the United Nations Climate Change Conference (COP25), they must address more than future targets for reducing greenhouse-gas emissions.

They must also address the harm to people and livelihoods that climate change is already causing.

Strengthening our ability to adapt to climate change has never been more urgent.

Many regions are experiencing major difficulties as a result of higher global temperatures and changing weather patterns.

We must do more to help citizens and governments tackle issues such as rising sea levels, wildfires, hurricanes and other natural disasters, and increased coastal erosion.

Even if we meet the Paris agreement's goal of limiting the average global temperature increase to well below 2C, at least 570 cities and some 800mn people will be at risk from rising sea levels and more frequent and destructive storms.

And these dangers will grow as temperatures climb ever higher. The very existence of some island countries and coastal communities will be threatened.

It is thus essential to reduce the risks that climate change poses to humans and the economy.

Unless action is taken, climate change will reduce global GDP per capita by more than 7% by 2100, with equally severe

consequences for countries, whether they are rich or poor, hot or cold.

The economic and broader social benefits of adaptation to climate change are clear.

In September, the Global Commission on Adaptation issued a report calling on governments, businesses, and communities to take urgent action to step up adaptation measures.

The report finds that an investment of \$1.8tn across five key areas — early warning systems, resilient infrastructure, agriculture, mangrove protection, and resilient water supplies — from 2020 to 2030 could generate \$7.1tn in benefits.

Still, today's investment gap is huge.

The climate challenge demands much deeper co-operation between the public and private sector to increase green investment.

We need to ensure that infrastructure is built to cope with the increased impact of climate change and develop clear global standards for disclosing the climate risks that investment projects pose.

For example, how will a city cope with increased flood risk, and how will agricultural land be maintained productively as droughts grow more severe? Big and small investors alike should know exactly how their money could be affected by a changing climate.

Here, public investment institutions like the European Investment Bank can assist with adaptation in many ways.

The EIB has long invested in projects that reduce emissions and help countries adapt to climate change.

But now we are making even larger strides toward strengthening adaptation, by deepening our expertise, creating new systems to ensure the resilience of our investments, and working closely with the public and private sectors.

For example, we will no longer fund infrastructure projects that are not climate resilient.

Accordingly, we have introduced a climate risk-management system, and are adding climate adaptation criteria to all infrastructure projects.

The EIB will also be focusing on adaptation from the very

earliest stages of project preparation, both through advisory services and technical assistance.

Whereas we have gained much experience in the field, many of our public- and private-sector clients may lack the resources or expertise to assess climate risks.

For example, the EIB has been working closely with the Caribbean Development Bank to ensure that all of its projects consider climate risks, and to develop a pipeline of climate-friendly investment projects worth more than \$300mn.

Finally, the EIB plans to increase its support for innovative technologies such as weather analytics and climate-resilient food systems, to help companies, individuals, and communities prepare for climate change.

To that end, the EIB now supports the Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT), the first private-sector fund dedicated to addressing these problems in developing countries.

The EIB is also raising its climate-finance target, so that at least 50% of its lending will support environmental sustainability by 2025 — an increase from around 30% today.

And by 2030, the EIB Group plans to support \$1.1tn of climate action and environmental sustainability investments through loans and grants, including for developing countries to help them strengthen the resilience of roads, railways, ports, farmland, sanitation and drinking water systems, and digital-communication networks.

Underinvestment in adaptation is particularly a problem for low-income countries, most of which are located in hotter, more vulnerable regions.

Supporting these countries' efforts to adapt to climate change is essential to their ability to develop.

Yet we also must not lose sight of the big picture.

The higher global temperatures rise, the less we will be able to rely on adaptation.

Scientists estimate that we are now heading for a temperature increase of 3-4C by the end of the century, with disastrous consequences for people around the world.

The world's most vulnerable populations are already bearing the brunt of climate change, because they are the most exposed to the risks and have the fewest resources with which to adapt.

But, given that all cities, regions, and countries are facing some type of climate risk, the adaptation imperative simply cannot be ignored. — Project Syndicate

* Emma Navarro is Vice President of the European Investment Bank.

Climate change crisis: global action needed before it's too late



Scientists said that average temperatures from 2010-2019 look set to make it the warmest decade on record.

Provisional figures released by the World Meteorological Organisation (WMO) suggest this year is on course to be the second or third warmest year ever.

If those numbers hold, 2015-2019 would end up being the warmest five-year period in the record.

This "exceptional" global heat is driven by greenhouse gas emissions, the WMO says.

The organisation's State of the Global Climate report for 2019 covers the year up to October, when the global mean temperature for the period was 1.1C above the "baseline" level in 1850.

Many parts of the world experienced unusual levels of warmth this year.

South America, Europe, Africa, Asia and Oceania were warmer than the recent average, while many parts of North America were colder than usual.

Two major heat waves hit Europe in June and July this year, with a new national record of 46C set in France on June 28.

New national records were also set in Germany, the Netherlands, Belgium, Luxembourg and the UK.

In Australia, the mean summer temperature was the highest on record by almost a degree.

Wildfire activity in South America this year was the highest since 2010.

The WMO clearly links the record temperatures seen over the past decade to ongoing emissions of greenhouse gases, from human activities such as driving cars, cutting down forests and burning coal for energy.

"On a day-to-day basis, the impacts of climate change play out through extreme and 'abnormal' weather.

And, once again in 2019, weather and climate-related risks hit hard," said the WMO's secretary-general Petteri Taalas.

"Heatwaves and floods which used to be 'once in a century' events are becoming more regular occurrences. Countries ranging from the Bahamas to Japan to Mozambique suffered the

effect of devastating tropical cyclones. Wildfires swept through the Arctic and Australia," Taalas continued.

"It's shocking how much climate change in 2019 has already led to lives lost, poor health, food insecurity and displaced populations," said Dr Joanna House, from the University of Bristol.

The World Health Organisation (WHO) has warned that climate change is mostly affecting human health, affirming that it causes the death of 7mn people annually in the world's various regions.

A large number of people suffer annually from pollution, heat stress, injuries and deaths resulting from extreme climate variability and insect-borne diseases such as Malaria, revealed Maria Neira, Director of WHO's Department of Environment, Climate Change and Health, in a report about the impact of climate change on human health, during the UN Climate Change Conference in Madrid.

Neira urged governments to take serious measures to reduce greenhouse gas emissions, as air pollution and climate change kill 7mn people annually.

"Health is paying the price of the climate crisis, because our lungs, our brains, our cardiovascular system is very much suffering from the causes of climate change which are overlapping very much with the causes of air pollution," said Neira, calling the lower than 1% of international financing for climate action that goes to the health sector "not enough and absolutely outrageous". The Director considered climate change as potentially the greatest health threat of the 21st Century, explaining that governments find difficulties in obtaining international climate finance to protect the health of their people and prevent the effects of this ongoing climate change.

The Climate Change Conference in Madrid, we hope, will strengthen the global action against this climate emergency and fulfil Paris' climate agreement starting 2020.