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Operationalising and Implementing the Paris Agreement: Issues of Interest for the GCC Countries

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Summary

- Following the historic Paris Agreement on climate change of 2015, there are two tasks for the UN Framework Convention on Climate Change (UNFCCC) and its member states: (1) **operationalising** the Agreement and ensuring its smooth entry into force; and (2) supporting and incentivising states and non-state actors to ensure the **implementation** of their national climate plans and scaling up of ambition.
- In each of these areas the Gulf Cooperation Council (GCC) countries could engage in specific ways:
- In the area of operationalisation, the GCC countries could actively participate in the **design of the Paris Agreement's enhanced transparency framework**, which will set the parameters for the reporting and review of all countries' climate plans and actions.
- By **stepping up their participation in the UNFCCC's existing, bifurcated transparency mechanism**, which for the GCC countries includes the preparation of a biennial update report and its presentation in a workshop, the GCC countries would be well-positioned to participate in the new transparency framework, which will require regular reporting.
- The GCC countries should also **ensure that they are able to participate in the decision-making under the Paris Agreement** once it enters into force, which could be as early as 2017. This can be ensured by early ratification of the Agreement and participation in the negotiations on the organisation of the first session of the meeting of the Parties (CMA).
- In the area of implementation, the GCC countries can now **work to convert their national climate plans into actionable policies**. All GCC states submitted their intended nationally determined contributions (INDCs) in 2015. Upon joining the Agreement, these will become each country's national climate plan ('NDC') unless the country decides otherwise.
- By 2020, at least one GCC country, the UAE, may be expected to **submit a new NDC** (given the plan's early timeframe, 2021), which must be more ambitious than the previous one.
- The 2016 Conference of the Parties (COP) to the UNFCCC will be hosted by Morocco, in Marrakesh, in November. Having **a COP in the region provides a venue for showcasing GCC countries' pre-2020 actions and plans**, and demonstrating regional leadership.
- Outside the UNFCCC, the GCC countries should pay attention to two major international processes that are expected to result in **new regulation relating to greenhouse gas (GHG) emissions in 2016** and which carry major importance for them:
- The International Civil Aviation Organization is expected to agree **on a global, mandatory market-based mechanism for international aviation emissions**.
- Under the Montreal Protocol on Substances that Deplete the Ozone Layer, parties may agree on an **amendment to the Protocol on the regulation of hydrofluorocarbons**, which are a potent GHG used mainly in refrigeration and air conditioning.
- By aligning their economic diversification efforts with the implementation of the Paris Agreement, the GCC countries can simultaneously support sustainable development at home and convey an image of regional leadership internationally.

The Issue

Following the historic Paris Agreement on climate change of 2015, attention in the UN climate regime has shifted from political negotiations on the broad principles and rules of global climate governance to more technical work to make the new agreement operational.

At the same time, 187 countries have submitted their national plans (known as intended nationally determined contributions) in support of the Paris Agreement. The international community now needs to ensure that these plans are implemented and countries upgrade them periodically so that, collectively, emission reductions, adaptation measures and financial and other support eventually reach levels sufficient to avoid dangerous climate change.

These two complementary tasks have different time frames and require very different types of resources. Carrying out the task of operationalising the Paris Agreement over the next couple of years will be the central task for the UN Framework Convention on Climate Change (UNFCCC). Implementing the Paris Agreement, however, will be a longer-term process, requiring efforts both within and outside the UNFCCC over the coming years and decades.

This EDA Insight examines some of the key actions required to implement the Paris Agreement in three areas, namely: undertaking the necessary preparatory work under the UNFCCC; strengthening the UNFCCC's approach to incentivising action, support and ambition by states; and incentivising cooperation among states and non-state actors beyond the UNFCCC. In addition, it provides a brief assessment of:

- progress so far in 2016 and expectations going forward, and
- related opportunities and challenges for the Gulf Cooperation Council (GCC) states.

Relevance for the GCC Countries

Operationalising and implementing the Paris Agreement brings a number of potential opportunities and challenges for the GCC countries, which include:

- **Negotiations on the Paris Agreement 'rulebook':** GCC countries could benefit from fully participating in the existing transparency mechanism under the Convention both to gain valuable experience for when the Paris Agreement enters into force and to be able to influence the design of the new transparency framework.
- **Preparations relating to the Agreement's entry into force:** An early ratification by the GCC countries of the Paris Agreement could bring positive attention and also guarantee full participation rights once the Agreement enters into force, possibly as early as 2017.
- **Action, support and ambition pre- and post-2020:** The COP 22 in Marrakesh provides a venue for showcasing GCC countries' pre-2020 actions and plans. With an eye on the post-2020 period, GCC countries have the urgent task of converting their national climate plans into actionable policies. By 2020, at least one GCC country, the UAE, may be expected to submit a new NDC given the 2021 timeframe of its central target.
- **Other international forums, cooperation and non-state actors:** Outside the UNFCCC, key international regulatory developments are expected to take place in 2016 in international aviation emissions and hydrofluorocarbon (HFC) regulation – two areas of importance for the GCC countries given their air transport industries and high ambient temperatures that require high levels of refrigeration and air conditioning, involving the use of HFCs. The GCC countries can also gain valuable experience and demonstrate leadership by actively participating in a select number of international multi-stakeholder partnerships working at sub-national and sectoral levels.

2016 – The Year of Implementation

After the two UN landmark agreements of 2015, on the 2030 Agenda for Sustainable Development and the Paris Agreement, the year 2016 has been dubbed as the year of implementation. For climate change governance, this means kick-starting the preparations to enable the entry into force of the Paris Agreement, and strengthening the UNFCCC's current approach to incentivising action, support and higher ambition by all states, as well as non-state actors. After Paris, there has also been a general expectation for the UNFCCC negotiations to maintain the political momentum achieved by the Paris Conference in December 2015.

The first important test on maintaining momentum was the Paris Agreement signature ceremony, held in New York, which was passed with flying colours. On 22 April, a total of 174 countries, including five GCC countries (Bahrain, Kuwait, Oman, Qatar and the UAE), signed the Agreement, marking the highest number of countries ever to sign an international agreement on one day. A number of other international events in the first half of 2016 have also sought to maintain the momentum (see Box 1).

The Bonn Climate Change Conference, which took place from 16-26 May, was the only UNFCCC intersessional meeting in 2016. The main objective of the meeting, as is common for the mid-year intersessionals under this Convention, was to prepare the ground for the next session of the Conference of the Parties (COP), which this year will take place from 7-18 November 2016 in Marrakesh. This included launching the work on the preparations for the entry into force of the Paris Agreement and its operationalisation.

The Bonn meeting had the crucial task of demonstrating that the momentum from Paris would be maintained and that countries would not retreat from their promises. Overall, Bonn delivered on the expectations, agreeing on the agenda and *modus operandi* of a body tasked with overseeing the work programme resulting from Paris, and initiating exchanges of views on its agenda items.

At the same time, the meeting signalled a quieter time in the work of the UNFCCC negotiators, as most work in the coming years will be of a technical nature. As a reflection of this shift in purpose, Bonn brought together just 1,700 party representatives and 1,100 observer representatives – a significant change from Paris where 19,300 country delegates and 8,300 official observers attended.

The Bonn conference managed to maintain a constructive atmosphere and initiate the preparations as mandated. However, contrary to what some had hoped, it did not deliver much 'homework' for parties or the UNFCCC Secretariat for the months preceding COP 22. Despite a number of calls for technical papers and workshops, parties in Bonn only agreed to open a call for submissions of views on its different agenda items.¹

With these results, countries will have a great deal of work ahead in Marrakesh, where a number of other issues that were not on the Bonn meeting's agenda will be also taken up, including the issue of loss and damage (which occurs when adaptation is no longer possible), and a number of finance issues. In addition to issues on the negotiating agenda, Marrakesh, as other recent COPs, will see a number of high-level and multi-stakeholder events targeted at keeping up the political momentum and engaging with the 'world outside the UNFCCC'.

After the highly successful New York signing ceremony and the fairly successful Bonn meeting, the tasks ahead for global climate governance relate to:

On preparatory work,

- short-term negotiations under the UNFCCC on the Paris Agreement 'rulebook'; and
- short-term negotiations under the UNFCCC to ensure a smooth entry into force of the Agreement;

On enabling and incentivising work,

- short-term work under the UNFCCC on the implementation of the Convention by states pre-2020; and
- ongoing work under the UNFCCC on the implementation of the Paris Agreement by states post-2020; and

On work outside the Convention,

- regulatory developments outside the UNFCCC; and
- cooperative activities among states and non-state actors that go beyond the Convention.

Box 1: Sustaining the Paris Momentum Outside the UNFCCC

A number of other international events in the first half of 2016 have sought to support the political momentum achieved with the Paris Agreement. These events also reflect the now broadly accepted recognition that actions and investments by non-state actors are essential to reach the Agreement's goals, and that 'clubs' of major economies and other interested states can play an important role keeping up the political momentum, and encouraging and supporting enhanced action.

In May, the 'Climate Action 2016' high-level event in Washington D.C., co-hosted by seven international organisations from the finance, business and non-profit sectors and the UN system, brought together 700 representatives from various sectors to focus on coalition-building for accelerated implementation. Also in May, the G7 issued a leaders' declaration in which they expressed commitment to supporting the early entry into force of the Paris Agreement and its implementation. In the September G20 Summit, the Paris Agreement is also expected to figure prominently.

In June, the Clean Energy Ministerial (CEM), an annual meeting of energy ministers from 23 countries (including two GCC countries) met to take stock of progress on the initiative's multiple sustainable energy campaigns, and decided to upgrade the initiative to include a permanent secretariat, hosted by the International Energy Agency (IEA). The same meeting also saw the inaugural ministerial meeting of Mission Innovation, which was launched at COP 21 to accelerate clean energy innovation globally. A US-initiated platform, similarly to the CEM, Mission Innovation brings together 20 countries (including the same two GCC countries) and the EU around the aim of doubling public clean energy research and development investment over the next five years.

Before Marrakesh, this 'year of implementation' may also see some regulatory developments, with the International Civil Aviation Organization (ICAO) Assembly, taking place in September–October in Quebec, Canada, expected to decide on the establishment of a global market-based mechanism (MBM) scheme for international aviation emissions, which are not in practice covered by the UNFCCC.

Further, in October, the 28th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer will convene in Kigali, Rwanda, to consider proposals on an amendment to the Protocol to address hydrofluorocarbons (HFCs), which are a potent GHG and covered under the UNFCCC but largely the result of actions resulting from the implementation of the Montreal Protocol as they are used as replacements for ozone-depleting chlorofluorocarbons and hydrochlorofluorocarbons.

Negotiations on the Paris Agreement 'Rulebook'

While the Paris Agreement lays out all its key principles and procedures, their operationalisation is left to the different bodies of the Convention. The UNFCCC secretariat has identified more than 50 specific tasks delegated by the Agreement and its supporting COP decision, most of which have a due date in the next two or three years.

Consequently, over the next couple of years, one of the main tasks of the UNFCCC negotiations will be to develop, and agree to, the Paris Agreement 'rulebook' that will establish the operational details of its key mechanisms, including: guidance on the streamlined presentation of national climate plans; guidelines for the Agreement's transparency framework; modalities of the 'global stocktake' to assess collective progress towards the Agreement's goals; and the features of a committee focusing on facilitating implementation and promoting compliance.

Transparency: Among the numerous important issues under negotiation around the Paris Agreement rulebook, transparency is one requiring immediate attention from a number of states, and in particular those with a developing country status (including the GCC countries), as it will in many cases require setting up a number of monitoring, reporting and verification processes that are currently not in place or require further development. Data for a number of important indicators may be lacking, as may the institutional capacity to develop and execute such processes. Coordination among the different domestic institutions can also present challenges.

The Paris Agreement establishes a 'transparency framework for action and support' that will build on countries' different capabilities and draw from existing transparency arrangements under the Convention. The purpose of this framework, which will be applicable to all countries, will be to provide a clear understanding of climate change action and support both collectively (in terms of achieving the Convention's goal and in

terms of financial support provided) and individually (in terms of countries' NDCs, adaptation actions, and support provided and received). In addition to greenhouse gas (GHG) inventories, all countries will be required to submit information on progress they have made towards implementing their NDCs.

This information will inform the global stocktake – a collective process taking place every five years starting from 2023 that, together with the NDCs process, forms the core mechanism of the Paris Agreement for monitoring progress towards the Agreement's goals and ratcheting up ambition.

The current transparency arrangements under the Convention include the Annex I (developed) countries' biennial reports (BRs) and their international assessment and review (IAR) process, and the non-Annex I (developing) countries' biennial update reports (BURs) and their international consultation and analysis (ICA) process. Both the IAR and ICA processes include a peer-review system, organised in the form of in-session workshops. Under the IAR, first round of the Annex I countries' 'multilateral assessment'

(MA) was conducted in 2014–2015, during which 45 parties were assessed.

The Bonn meeting saw the first 'facilitative sharing of views' (FSV) (see Box 2), which is the equivalent review process under the ICA. In this first FSV workshop 13 developing countries presented their BURs, which include information on national GHG inventories, mitigation actions, and related needs and support received. The first FSV workshop was welcomed by many for its positive and respectful atmosphere. The next workshop will take place at COP 22.

However, so far (by mid-May 2016), only 32 BURs have been submitted, while there are more than 150 non-Annex countries. In Bonn, the SBI, one of the UNFCCC's two permanent bodies, noted in its conclusions on non-Annex I reporting that developing countries face challenges with regard to the BURs. The SBI also encouraged countries that have not yet completed their first BUR to do so as soon as possible, and to request support from the Global Environment Facility, as applicable.

Box 2: Biennial Update Reports and Facilitative Sharing of Views – UNFCCC pre-2020 Transparency Arrangements for Developing countries

Currently, the reporting processes for Annex I and non-Annex I countries are being developed under the Subsidiary Body for Implementation (SBI) – one of the UNFCCC's two permanent bodies. These agenda items are closely linked to the agenda item of the *Ad Hoc* Working Group on the Paris Agreement (APA) – the body established in Paris to prepare for the entry into force of the Agreement – on the modalities, procedures and guidelines for the Paris Agreement's transparency framework.

A key issue under discussion under this APA agenda item will be how to operationalise built-in flexibility (along the principle of 'in the light of different national circumstances', introduced by the Paris Agreement) in a framework that will have common modalities. In Bonn, parties' views still differed on this issue.

As decided by COP 17 in 2011, developing countries should submit their biennial update reports (BURs) every two years, 'consistent with their capabilities and the level of support provided for reporting'. After a country has submitted its BUR, a team of technical experts prepares a technical analysis of the report. In the second step, the country presents its BUR at a facilitative sharing of views (FSV) workshop, which convenes under the SBI. As agreed in COP 16, the FSV should be 'non-intrusive, non-punitive and respectful of the national sovereignty'. The presentation and a summary report of the workshop are then uploaded on the UNFCCC website.

Support for non-Annex I countries for the preparation of their national reporting is made available by the Global Environment Facility (GEF), the Green Climate Fund (GCF), the Global Support Programme (GSP, run by the UNDP and UNEP), the non-Annex I parties' Consultative Group of Experts on National Communications and Annex I Parties. The GEF is also supporting the establishment of a Capacity-building Initiative on Transparency, established in Paris to build related institutional and technical capacity in developing countries, and will provide a report with further information on related progress at COP 22.

Support for the preparation of BURs is available in the form of training materials, workshops, networking opportunities and expert rosters provided by the CGE and the UNFCCC Secretariat. In addition, the GEF provides each non-Annex I party up to US\$325,000 for the preparation of BURs. The fact that most GCC countries are not members of the GEF is not an obstacle as all non-Annex I parties are eligible to receive this financing.

Challenges for the GCC: All GCC countries have already submitted at least one national communication (a sister process to the BURs), which means they have undertaken at least one national GHG inventory calculation exercise. For some GCC countries, however, the latest information on emissions is for 1994, which presents significant challenges to present-day climate policy-making as it makes goal-setting an exercise reliant on external estimates. The GCC countries' efforts to design climate change policies and targets, and to estimate related support needs, will be greatly hindered if they do not develop and publish more up-to-date data on emissions.

Nevertheless, all GCC countries submitted their intended contributions to the Paris Agreement in the autumn of 2015. Some of these include quantitative economy-wide, sectoral or technology-specific targets. Oman's intended contribution includes a conditional 2% deviation in GHG emissions growth from business as usual projections. That of Saudi Arabia includes actions and plans with mitigation co-benefits equivalent to 130 million tonnes of CO₂eq avoided by 2030, and that of the UAE a clean energy target of 24% by 2021. Overall, however, the intended contributions mostly refer to strategies, plans and actions, many of which are already being undertaken.

Opportunities for the GCC: All the GCC countries are yet to submit their first BURs to the UNFCCC, and only four Arab countries (Lebanon, Mauritania, Morocco and Tunisia) had submitted theirs by mid-May. By preparing and submitting their first BURs, the GCC countries can demonstrate regional leadership. The BUR exercise will also support the development of the national monitoring, reporting and verification systems required of parties to the Paris Agreement. Also, by participating in the FSV the GCC countries will gain valuable experience both for the further development of their national frameworks, and for being well-positioned to provide inputs into the development of the Paris Agreement transparency framework.

The Agreement's Entry into Force

By June 2016, 17 countries, accounting for 0.04% of global GHG emissions had ratified the Paris Agreement, and at least 27 countries had indicated their intent to join in 2016 or soon thereafter. For its entry into force, 55 countries, accounting for 55% of global GHG emissions must ratify.

In March, the US and China, which together account for approximately 40% of global emissions, announced their commitment to join the Agreement 'as early as possible'. In June, India announced it would 'work toward this shared objective'. These statements have prompted a discussion on the possibility of an 'early' entry into force. At the same time, fears of a potential US withdrawal from the Agreement have been extenuated by President Obama's resolve to join the Agreement under his tenure, and the fact that withdrawal from the treaty will only be possible three years after its entry into force and will only take effect one year after a country has submitted its withdrawal notification.

A number of experts have developed scenarios on which major emitting countries would need to join for the Paris Agreement to enter into force. While it may be early to estimate when this threshold would be reached, given the number of assurances on rapid ratification by major economies, the Agreement may enter into force as soon as in 2017.

This prospect of an 'early' entry into force – something that was not generally expected when the Agreement was negotiated – has created pressure on the UNFCCC negotiators to agree on the Agreement's 'rulebook' and to have in place arrangements to ensure that countries whose domestic ratification processes take longer do not get excluded from decision-making.

In addition to the UNFCCC Secretariat issuing an information note on the legal and procedural implications of early entry into force, this issue was discussed under the APA in Bonn. The main practical implication will be that the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 1) must convene at the first COP after entry into force.²

In Bonn, a number of countries supported an option that would involve CMA 1 suspending its session and requesting the COP to continue oversee the Paris work programme, but many expressed reservations and concerns, mainly relating to options to participate in the rulemaking process if they are still in the process of joining the Agreement. Some developing countries expressed concern over an early entry into force allowing for developed countries to avoid further raising their ambition in the pre-2020 period during which a strictly bifurcated system of obligations still applies.

According to Article 16 of the Paris Agreement, only parties to the Agreement have full participatory rights in the CMA, and non-parties can participate as observers but are excluded from decision-making. In Bonn, some countries proposed adopting the approach taken under the Kyoto Protocol where an 'inclusive approach' has been taken to non-parties' participation in contact groups and informal consultations.

Based on parties' consultations with the Presidency, there is also a strong interest in a clear result on this matter from COP 22, which would include clarity on how preparatory work will be continued and how inclusiveness will be resolved, and which would send a clear message to the world that countries are prepared for, and look forward to, the Agreement's entry into force.

Challenges for the GCC: Five GCC countries have already signed the Paris Agreement. Different countries have different domestic regulatory systems with regard to joining international treaties, with some requiring acceptance by the parliament and others only needing an executive signature. In the UAE, for example, ratification requires obtaining the Cabinet's approval. Although COP 22 is expected to provide assurances on an inclusive approach upon entry into force, if the Paris Agreement were to enter into force when the GCC countries are still in the process of joining it, they would be excluded from any decision-making by the CMA – even if the possibility of the CMA taking important decisions through a non-inclusive approach at an early stage seems highly unlikely. Over time, however, the risk of exclusion will increase.

Opportunities for the GCC: Similarly to the issue of national reporting, an early ratification could send a positive, powerful political message to the world. This was the case for Palestine, which was among the 14 states to ratify the Agreement on the day of the New York signing ceremony. Amplifying the message was the fact that Palestine had only joined the UNFCCC in December 2015. Also, as any other state, by finalising their national processes to join the Paris Agreement in a timely manner the GCC countries will ensure a seat in the table when decisions are taken on the future of the climate regime.

Action, Support and Ambition, pre- and post-2020

Pre-2020: Given the general expectation at the time of negotiation that the Paris Agreement would enter into force around 2020, the Agreement's accompanying decision includes a section on 'enhanced action prior to 2020' (see also Box 3). Among other things, the decision strengthens the existing pre-2020 Technical Examination Process, which has taken the form of in-session Thematic Expert Meetings (TEM) focused on different aspects of mitigation, by broadening its scope and including TEMs focusing on adaptation.

A facilitative dialogue on pre-2020 ambition and support mandated by Paris will also take place at COP 22, as will a high-level event under the Action Agenda established under the COP 21 Presidency focusing on pre-2020 action. Paris also mandated the appointment of two high-level champions who will engage with parties, non-state actors and the UNFCCC Secretariat to incentivise implementation and ambition in the pre-2020 period.

Currently, the two champions are the French Climate Change Ambassador Laurence Tubiana and the Moroccan Minister in charge of the Environment Hakima El Haite. In early June, the champions released a 'roadmap' containing a detailed agenda for the second half of 2016 that aims to 'boost cooperative action between governments, cities, business[es], investors and citizens to cut emissions rapidly and help vulnerable nations adapt to climate impacts and build their own clean energy, sustainable futures.'

The Moroccan COP Presidency has signalled that pre-2020 action will be a priority issue on the COP 22 agenda. Focal areas in this regard, in addition to the Action Agenda, will include strengthened action on mitigation and adaptation by all parties, and mobilising finance, technology and capacity building support pre-2020.

Opportunities for the GCC: The organisation of COP 22 in the MENA region could be leveraged by the GCC countries to showcase their existing and planned actions and cooperative initiatives. Active participation in the high-level events and the TEMs at COP 22 would also help position the GCC countries as proactive players in showing their support to action and ambition in the pre-2020 period.

Box 3: Trust as an Issue in the pre-2020 Period

Whilst the Paris Agreement does not contain specific references to its application only being 'post-2020', there is a general understanding that actions and support pre-2020 are underpinned by a stricter differentiation between developed and developing countries' responsibilities under the Convention.

Enhancing action (mitigation and adaptation), support (finance, technology and capacity building) and ambition (increased targets) pre-2020 also has an important trust dimension. In Bonn, reminders by developing countries and environmental NGOs were heard again on the importance of pre-2020 action and ambition for successful post-2020 action and ambition. Some developing countries fear that developed countries will use the more flexible approach to differentiation taken in the Paris Agreement to avoid their responsibilities in the pre-2020 era, and point to the fact that the Doha Amendment on the second commitment period of the Kyoto Protocol (2012–2020) is yet to enter into force.

The lack of a clear roadmap and milestones on how the developed countries will mobilise US\$100 billion annually by 2020 in climate finance for developing countries is also a continuing source of mistrust. The Paris Agreement decision urges developed countries to provide this road map. The process initiated by the Paris Agreement to agree on an accounting methodology for public climate finance by 2018 is a step towards providing clarity, but many countries feel this alone is not enough.

Post-2020: The Paris Agreement sets the goal to strengthen the global response to the threat of climate change by holding the global average temperature rise to well below 2°C (or pursuing efforts to limit it to 1.5°C) above pre-industrial levels.

As the central mechanism for doing so, the Agreement establishes 'nationally determined contributions' (NDCs), which all parties are required to undertake and communicate periodically. A country's NDC must include domestic mitigation (GHG reduction or limitation) measures and it may include information related to adaptation and support (namely financing, technology transfer and development and capacity building).³ Each NDC must represent a progression over time, based on five-year cycles of communications starting from 2020. Furthermore, a party to the Paris Agreement may at any time enhance the level of its NDC.

In order for the NDCs, and consequently the Paris Agreement, to deliver results, countries must translate them into actionable policies and investments. Many developing countries will need support in delivering on their nationally-determined targets, including through capacity building, technology and finance. As a reflection of this, many countries' intended NDCs (INDCs, submitted in support of the Paris Agreement prior to joining it) include, often alongside an unconditional component, a conditional mitigation component to be achieved with the help of external support.

Public financing provided by developed countries to developing countries for the implementation of their NDCs has a crucial role to play both as a source of finance and in leveraging finance from other sources, but finance from private sources will ultimately be the only way to mobilise sufficient investment flows. According to one estimate, of a total of US\$391 billion in climate finance flows in 2014, two-thirds came from private investors. Developed and developing countries generally disagree on the necessary level of public finances to be provided through the UNFCCC (see also Box 3), which may indirectly affect the level of ambition of some developing countries' NDCs in the future.

Some attempts have been made to quantify the financing and other support needs resulting from the INDCs submitted by developing countries. This task is complicated by the fact that many INDCs do not include specific price tags and others do not specify the share of international financing of the total financing needed. One estimate puts developing countries' total investment needs between 2020 and 2030 at US\$3.5 trillion, with at least US\$420 billion (or US\$42 billion per year) expected to come from international sources. However, this latter figure is likely to be a significant underestimate, as for a share of US\$3 trillion of the total sum countries have not specified whether the source would be domestic or international. Complicating the picture further is the fact that, of this total, US\$2.5 trillion comes from India's INDC, while China has not quantified the cost of its INDC's implementation.

In addition to implementation support, many developing countries will also need support for developing their subsequent NDCs and undertaking the reporting obligations that arise from the Paris Agreement.

Challenges for the GCC: The GCC countries have not quantified the total financing needs in their INDCs. In the case of Oman, the entire INDC's implementation is made conditional on assistance provided through the UNFCCC. Bahrain's INDC notes a correlation between the level of implementation and level of support received. Qatar's INDC requests technology transfer for implementing clean and renewable energy. Saudi Arabia's INDC notes that it will be seeking technical assistance and sustained capacity building support under the UNFCCC.

Not knowing the cost of a country's climate change plan – as well as related economic savings that can be achieved – complicates its translation into concrete policies and investment plans, and into clear articulations of possible support needs.

Opportunities for the GCC: The first concrete step for any country relating to their INDC post-Paris is to translate it into the country's first NDC. Unless it decides otherwise, a country's INDC will automatically become its NDC upon ratification. In addition, countries with an INDC containing actions with a timeframe ending in 2025 or before are expected to communicate a new NDC by 2020, which should represent progression over the previous one. This could apply for example to the UAE, which has an INDC with a clean energy target for the year 2021.

Countries with a timeframe up to 2030 are expected to 'communicate or update' their NDC by 2020. Bahrain's and Qatar's NDCs, for example, refer to these countries' respective national visions for the year 2030. Saudi Arabia's and Oman's INDCs specify 2030 as their timeframe.

The years between 2016 and 2020 represent an opportunity for the GCC countries to work on revising their NDCs and, in the case of the UAE, to prepare a new NDC. Developing NDCs that are based on sound data on GHG emissions (as discussed above) and include clear mitigation and adaptation (co-benefit) targets would not only support the assessment of collective ambition but would also support robust climate policy-making and implementation domestically.

Nationally appropriate mitigation actions (NAMAs) are a further tool that the GCC countries could explore to translate their national-level targets and visions into implementable sectoral and project-based actions that can receive external support under or outside the UNFCCC.

International Cooperation and Non-State Actors

A large range of potential climate action and support falls beyond the regulatory scope of the UNFCCC. This includes action by other intergovernmental organisations, and international cooperative initiatives that include sub-national and non-state actors.

Given the currently insufficient level of collective ambition by states, parties to the UNFCCC are increasingly recognising that this action is instrumental for the success of the Paris Agreement. The Action Agenda, the TEMs and the climate champions are the most tangible examples of this. In this space, however, the intergovernmental UNFCCC can only seek to inspire action. A few examples of key developments in 2016 in this area are discussed below.

Other international organisations: The International Civil Aviation Organization (ICAO) Assembly in September–October and the Meeting of the Parties to the Montreal Protocol in October are expected to result in important regulatory progress in the areas of international aviation emissions and hydrofluorocarbons (HFCs), respectively (see also Box 1). Both areas are seen as crucial for raising ambition, in particular in the pre-2020 period. International aviation currently accounts for 5% of global CO₂ emissions but this share is expected to rise to 10–32% by 2050. HFCs currently account for a very small amount of global emissions but their use is increasing rapidly. They bear important mitigation potential given the fact that they are extremely potent GHGs with a relatively short life in the atmosphere.

Challenges and opportunities for the GCC: Some GCC countries serve as important global aviation hubs, with the Dubai International Airport alone recording more than 78 million passengers in 2015, and host major national airlines. The GCC states therefore have a stake in making the future of international aviation sustainable, both environmentally and economically. Similarly, due to their high ambient temperatures which require high levels of refrigeration and use of

air conditioning involving the use of HFCs, the GCC states have a stake in ensuring that alternatives to these gases are viable and governed under a robust international regime that provides support to those developing countries needing it. The GCC states should therefore consider actively participating in the ICAO and Montreal Protocol negotiation processes to ensure that the highest level of ambition is achieved while the GCC countries' national interests are represented.

International cooperative initiatives: The build-up to the Paris conference mobilised more than 70 'transformational initiatives' under the Action Agenda, which include more than 7,000 local authorities and 2,000 companies and which made numerous pledges in a variety of sectors in support of the Paris Agreement. It is still not clear how these sub-national and non-state actors' pledges relate to countries' NDCs. Initial attempts have been made to quantify their additional mitigation impact, with one study placing the impact of 19 major initiatives at 6–11 gigatonnes of CO₂eq compared to business as usual (considering the INDCs) by 2030. This would constitute a major contribution to closing the 14 gigatonne 'emissions gap' between countries' climate plans and the levels of emission reductions required to keep global temperature rise increase below 2°C from pre-industrial times.

Opportunities for the GCC include participating in some of these initiatives to gain and share experiences with peers, coordinate policies and pool financing. Examples from these three areas include the C40 Cities Climate Leadership Group (in which Dubai already participates), the Climate and Clean Air Coalition to Reduce Short-lived Climate Pollutants (with 50 member countries but so far none from the GCC), and the International Solar Alliance (of which three GCC countries are already members). The UNFCCC's Non-State Actor Zone for Climate Action (NAZCA) web portal contains information on a total of 77 cooperative initiatives.

Glossary: International Climate Change Governance Terminology

Sources: UNFCCC website, Montreal Protocol website and author.

Action: In the context of the UNFCCC, generally refers to mitigation or adaptation actions (see below).

Adaptation: Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects.

Annex I party: The industrialised countries listed in Annex I to the UNFCCC, which include the OECD members, the EU and countries with economies in transition.

Biennial report (BR): Outlines an Annex I party's progress in achieving emission reductions and the provision of financial, technology, and capacity-building support to non-Annex I parties.

Biennial update report (BUR): Provides an update of the information presented in a non-Annex I party's national communication, in particular on national GHG inventories, mitigation actions, constraints and gaps, including support needed and received.

Conference of the Parties (COP) to the UNFCCC: The supreme decision-making body of the UNFCCC, which meets once a year to review the Convention's progress.

Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA): The supreme decision-making body of the Paris Agreement, which meets once a year to review the Agreement's progress.

Facilitative sharing of views (FSV): A workshop-based review of non-Annex I parties' BURs as part of the ICA.

Hydrofluorocarbons (HFCs): Potent GHGs that are used in the air conditioning, refrigeration, foam and aerosol sectors as replacements for many ozone-depleting substances.

Implementation: Actions (legislation or regulations, judicial decrees, or other actions) that governments take to translate international accords into domestic law and policy.

Intended nationally determined contribution (INDC): A country's intended contribution to the Paris Agreement that includes information on its mitigation targets or actions, and may include other types of information, including relating to adaptation planning.

International assessment and review (IAR): The current transparency framework for Annex I parties that consists of a technical expert review and a MA workshop presentation of the country's BR.

International consultation and Analysis (ICA): The current transparency framework for non-Annex I parties that consists of a technical expert analysis and a FSV workshop presentation of the country's BUR.

Multilateral assessment (MA): A workshop-based review of Annex I parties' BRs as part of the IAR.

Mitigation: Intervention to reduce the sources or enhance the sinks of GHGs, such as efficient use of fossil fuels, switching to renewable energy, or expanding and conserving forests.

Montreal Protocol on Substances that Deplete the Ozone Layer: An international agreement that aims to reduce the production and consumption of ozone-depleting substances in order to reduce their abundance in the atmosphere, and thereby protect the Earth's ozone layer.

National communication: Report of a country's GHG inventory, and climate policies and measures, among other things, submitted as part of the UNFCCC's reporting system. At present, the required contents of national communications and their submission timetables are different for Annex I and non-Annex I parties.

Nationally determined contribution (NDC): A country's contribution under the Paris Agreement that includes a mitigation component, and may include information on adaptation plans and support needs, among others.

Non-Annex I party: Countries that have ratified/acceded to the UNFCCC and are not included in its Annex I.

Support (also: means of implementation): finance, technology development and transfer, and capacity building required for the implementation of the UNFCCC and/or the Paris Agreement.

Thematic Expert Meeting (TEM): In-session workshop that brings together experts from various sectors to identify scalable policy options, practices and technologies, and to promote their implementation and provision of related support in the pre-2020 period.

UN Framework Convention on Climate Change (UNFCCC): An international treaty with currently 197 parties that aims to achieve a stabilisation of GHG concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system.

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Endnotes

- 1) On the Paris Agreement's implementation and compliance committee parties only agreed to working further based on a set of guiding questions.
- 2) The two options currently under discussion are that the CMA would take over the work programme mandated by the Paris Agreement (and carry it out with the assistance of the two permanent subsidiary bodies and the APA), or that the CMA would suspend its first session and request the COP to continue overseeing the work programme (with the CMA taking stock of progress annually).
- 3) In addition, to articles on the objective of the Agreement and the NDCs, the Agreement includes articles covering key areas of climate action and support (mitigation, adaptation, loss and damage, finance, technology, capacity building), establishing mechanisms for transparency, stocktaking on progress, and implementation and compliance, and describing the Agreement's governance and entry into force.