Appendix 2: Briefing from the Institutional Investors Group on Climate Change (IIGCC) on the US withdrawal from the Paris Agreement

President Trump has announced that the US will withdraw from the Paris Agreement.

At this early stage, the mechanics of the US withdrawal are unclear. What we do know is that the President's announcement covers only the Paris Agreement and not the underpinning UNFCCC and is, at this stage, symbolic: the legalities of withdrawing from the Paris Agreement demand formalities that will need to be actioned over a 3-year period.

The impacts on US and global emissions will also take time to ascertain; however, in the short term this brief sets out what US states, cities and corporations, as well as what other countries, have committed to do on climate action regardless of the US' decision.

This brief sets out the broad questions and scenarios which now present themselves. It will be updated and revised as more information is forthcoming.

<u>What happens now?</u>

Article 28.1 of the Paris Agreement stipulates that a party can withdraw from the agreement by giving 1 year's written notification to the depository (i.e. the UN Secretary General), after 3 years of the agreement having entered into force for that party. The US has been a Party to the Agreement since it first entered into force on 4th November 2016 – so the earliest date it can withdraw by is 4 November 2020 (having handed in its formal written notice on 4 November 2019).

There is an open question as to whether the US President has the authority to withdraw unilaterally under US law, or whether he needs Senate approval. While the US Constitution confers the power to make treaties on the executive branch, with the advice and consent of the Senate, it does not address the ability to terminate or withdraw from a treaty. A general principle has not established by case law, meaning the question is treated on a case-by-case basis. If the Senate were to adopt a resolution opposing the President's unilateral withdrawal – in effect pitting the executive branch against the legislative branch - such a conflict could trigger a constitutional question requiring the intervention of the courts.

However, to date the Courts have never decided a case involving unilateral treaty withdrawal by the Executive based on its merits - but have rather declined to judge for various reasons. Some Justices are of the view that the courts can make judgements on this issue when the Executive and Congress are at an impasse; others view this as a political matter in which the courts should have no say. It is therefore uncertain whether the courts would hear a judicial challenge to President Trump's unilateral withdraw from the Paris Agreement.

What does this mean for emissions reductions in the US?

Economic implications

It is evident that clean energy transformation is embedded in economic and social and technological trends that are bigger than any one country – and this includes the US' domestic situation. For example, around 777,000 people are employed by renewable power in the US; solar industry employment grew 25% in 2016 to 373,807, far surpassing jobs in coal power generation (86,035), oil and gas extraction (~180,000), and coal mining (~50,000); employment in the US wind industry has reached 102,500 – growing by 28% in 2016; the solar and wind industries are both creating jobs 12 times faster than the rest of the US economy; and 2.2 million Americans are employed in the design, installation or manufacturing of energy efficiency products or services. While the decision to withdraw from Paris sends a damaging political signal to investors, there is a strong momentum of growth in green US industries which is on their side.

Local action

This momentum is further supported by actions on emission at state, city and corporate-level. Several states have targets for cutting greenhouse gas emissions that will not be affected by US withdrawal from the Paris Agreement, and New York Mayor Bill de Blasio has already committed his city to upholding Paris regardless of the President's decision. In other examples:

- California has a target to cut emissions 40% by 2030, compared with 1990 levels.
- Massachusetts, New Hampshire and New York plan to cut emissions 80% by 2050, compared with 1990 levels.
- Minnesota plans to cut emissions 80% by 2050, compared with 2005 levels.
- Los Angeles is developing a plan for 100% renewable power.
- A group of cities that aim to strengthen their efforts to cut emissions, the Mayors National Climate Action Agenda, has 72 members.

Corporate action

US business is also committed to the Paris Agreement and reducing emissions. Major US businesses – including Apple, Facebook, Google, Microsoft and Walmart – are directly buying renewable power and are committed to meeting all of their power needs from renewables. Google is the largest corporate buyer of electricity in the world and is due to use only renewable power from 2017.

More than 760 businesses, including EBay, Gap, General Mills, Intel, Kellogg's, L'Oréal, Levi's and Unilever have pledged "to do our part, in our own operations and beyond, to realize the Paris Agreement's commitment of a global economy that limits global temperature rise to well below 2 degrees Celsius".

The aviation industry, including US airlines, has agreed to cut emissions as part of an international plan that is separate from the Paris Agreement.

Geo-political implications

On the political side, the President's discretion in dismantling existing commitments will render his administration un-trustworthy. The President has many geo-strategic issues to attend to and he will need allies; withdrawing from the Paris Agreement will damage the reliability, credibility and competence of the US and make broader multi-lateral co-operation more difficult (see the recent example of the G7 Summit).

What about the rest of the world?

Even before Trump's announcement, it was clear that other international heavyweights remained committed to delivering on the Paris Climate Agreement:

- The G7 has sent a pointed respond to the Trump administration's lack of commitment to Paris. The final communique from the G7 meeting which just concluded in Italy states "The Heads of State and of Government of Canada, France, Germany, Italy, Japan, and the United Kingdom and the Presidents of the European Council and of the European Commission reaffirm their strong commitment to swiftly implement the Paris Agreement…"
- The communique singles out the US' lack of public commitment to Paris, and German Chancellor Angela Merkel has made her dissatisfaction with Trump's position clear.
- The EU's climate commissioner has previously said EU commitment to Paris is "irreversible". France's new President Emmanuel Macron has said "Our collective responsibility is to make sure this commitment remains a global commitment."
- In January, Chinese president Xi Jinping said the Paris agreement was "hard won", and "All signatories should stick to it instead of walking away from it, as this is a responsibility we must assume for future generations..." At an EU-China Summit on 2 June, the Declaration is expected to call on all parties "to uphold the Paris agreement", and Brussels and Beijing intend to signal their "highest political commitment" to doing so themselves.
- 195 of 197 countries that are party to the UNFCCC have signed the agreement. By withdrawing, the US will join the only countries that haven't – Syria (which is in the midst of a civil war) and Nicaragua (who did not sign because they did not view the final agreement as ambitious enough in terms of obligations placed on the developed world).
- 147 countries have ratified the Paris Agreement, including India, China and all the G20, with the exception of Russia and Turkey. 26 nations have ratified since Trump's inauguration, including Spain, Cuba and the Philippines.

The economic trend towards a transformation in the world's energy system is also holding strong:

- Growth: Renewable power has grown rapidly. In 2015, renewable generation capacity increased by 153 gigawatts (GW), the equivalent of about one-third of average US electricity demand.

- Wind (63GW) and solar power (49GW) accounted for about three quarters of the new additions. The wind power additions alone would be enough capacity to power 51 million homes (based on the demand of a typical US home, which is higher than in most other countries).
- More renewable power capacity is being built every year than all other sources combined. Renewable power is now the second-largest source of electricity after coal, providing nearly a quarter of the world's power.
- Investment: In 2015, $349 billion was invested in renewables, excluding large hydropower, compared with around $130 billion in coal and gas. Although investment fell 17% in 2016, installations were up 9%, reflecting falling costs.
- Investment is being driven from outside the US. China is expected to be the leader in expansion of clean energy, representing 40% of the total additions up to 2021. It plans to invest $361 billion in renewable power generation by 2020. India's solar power capacity is expected to grow eightfold. China's and India's pledges alone could double global wind and solar by 2030. India plans to increase renewable energy by a factor of five by 2022.
- Future expansion: The economic advantages of renewable power mean that its global expansion will continue regardless of the US decision on the Paris Agreement. Clean energy will be the largest single source of capacity growth in the next five years, according to the IEA. It predicts renewable capacity will grow by 42% to 2021, adding 825GW – the equivalent of more than 75% of the EU's entire power capacity.
- By 2020 the amount of renewable electricity generated each year will be higher than the current combined electricity demand of China, India and Brazil. A single country like the US abandoning ambition might marginally affect the speed of this expansion, but the larger trends mean that it is unlikely to have a significant effect.
- Renewables are becoming the cheapest way to produce power
- Renewables are now cheaper than fossil fuels in many contexts, thanks to rapid falls in the cost of wind and solar.
- Last year saw contracts signed to build renewable energy projects that will produce power for very low prices: $2.69 cents/kWh (solar), $3.0 c/kWh (onshore wind), and $4.9 c/kWh (offshore wind). The equivalent cost for a gas plant in the US is between 5 and 6 cents per kWh.
- Between 2010 and 2015 the cost of producing electricity from onshore wind fell by about 30%, while the cost of generating electricity from utility-scale solar fell by two-thirds. The cost of solar modules fell by up to 80% between 2010 and 2015.
- Global leadership on energy investment is shifting to China
- China has now surpassed the United States as the biggest investor in renewable energy, accounting for $102.9 billion of investment in 2015, over twice that of any other country. The US invested $44.1 billion in 2015.
- In January 2017, China announced it would invest $361 billion in renewables by 2020.

- Investment has created 3.5 million Chinese jobs in renewable energy and the government expects it will take employment in the sector to 13 million by 2020 – equivalent to adding over 5,000 new jobs a day.
- Between 2012 and 2015, China added 1.8 million jobs in renewables, compared with 157,000 in the US. Chinese companies dominate the global renewable energy market – the world's largest wind energy company and five of the top six solar firms are Chinese.