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Participatory Urban Learning Community Hubs through Research and Activation

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Science in the City

Building Participatory Urban Learning Community Hubs through Research and Activation

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824466

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CLIMATE ACTION:
WHY IT MATTERS

To limit global warming to 1.5°C, global carbon emissions need to fall by a staggering 45 per cent by 2030 from 2010 levels

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13 CLIMATE ACTION

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow. Weather patterns are changing, sea levels are rising, weather events are becoming more extreme and greenhouse gas emissions are now at their highest levels in history. Without action, the world's average surface temperature is likely to surpass 3 degrees centigrade this century. The poorest and most vulnerable people are being affected the most.

Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts. Climate change, however, is a global challenge that does not respect national borders. It is an issue that requires solutions that need to be coordinated at the international level to help developing countries move toward a low-carbon economy.

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13 CLIMATE ACTION

To strengthen the global response to the threat of climate change, countries adopted the Paris Agreement at the COP21 in Paris, which went into force in November of 2016. In the agreement, all countries agreed to work to limit global temperature rise to well below 2 degrees centigrade. As of April 2018, 175 parties had ratified the Paris Agreement and 10 developing countries had submitted their first iteration of their national adaptation plans for responding to climate change.

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What's the goal here?

Taking urgent action to tackle climate change and its impacts.

Why?

As greenhouse gas levels continue to climb, climate change is occurring at much higher rates than anticipated, and its effects are evident worldwide. By addressing climate change, we can build a sustainable world for everyone. But we need to act now.

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Are people's lives really being affected by climate change?

Yes. Severe weather and rising sea levels are affecting people and their property in developed and developing countries. From a small farmer in the Philippines to a businessman in London, climate change is affecting everyone, especially the poor and vulnerable, as well as marginalized groups like women, children, and the elderly.

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What happens if we don’t take action?

What happens if we don’t take action? If left unchecked, climate change will cause average global temperatures to increase beyond 3°C, and will adversely affect every ecosystem. Already, we are seeing how climate change can exacerbate storms and disasters, and threats such as food and water scarcity, which can lead to conflict. Doing nothing will end up costing us a lot more than if we take action now. We have an opportunity to take actions that will lead to more jobs, great prosperity, and better lives for all while reducing greenhouse gas emissions and building climate resilience.

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Can we solve this problem or is it too late to act?

To address climate change, we have to vastly increase our efforts. Much is happening around the world – investments in renewable energy have soared. But so much more needs to be done. The world must transform its energy, industry, transport, food, agriculture and forestry systems to ensure that we can limit global temperature rise to well below 2°C, maybe even 1.5°C. In December 2015, the world took a significant first step by adopting the Paris Agreement, in which all countries committed to take action to address climate change. Many businesses and investors are also committing themselves to lower their emissions, not just because it is the right thing to do, but because it makes economic and business sense as well.

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How much would it cost to solve this problem?

In total, public and private sector investment in clean energy needs to reach at least US$1 trillion per year by 2030, and more to build climate resilience. This sounds like a lot, but consider that of the US$1.7 trillion invested in the global energy supply in 2016, nearly 70% was related to fossil fuels. But more and more, governments and businesses are finding that investments in renewable energy and sustainability are paying off. What's more is that the estimated costs of mitigation do not account for the benefits of reduced climate change. These include cleaner air, greater food security, more liveable cities, and better health. Investments of only $6 billion for disaster risk reduction over the next 15 years would result in total benefits of $360 billion in terms of avoided losses over the lifetime of the investment.

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What can I do to help achieve this goal?

There are many things that each of us can do as individuals. To find out what you can do, go to: https://www.un.org/en/actnow

To read more about the UN's efforts on climate change: https://www.un.org/en/climatechange

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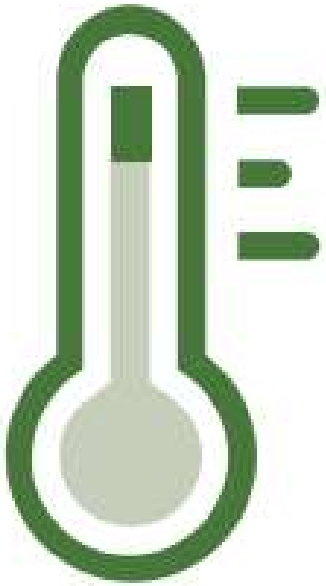

THE GLOBAL MEAN TEMPERATURE IN 2018 IS APPROXIMATELY

1°C ABOVE

THE PRE-INDUSTRIAL BASELINE

186 PARTIES

HAVE RATIFIED THE PARIS AGREEMENT

CLIMATE-RELATED AND GEOPHYSICAL DISASTERS

CLAIMED AN ESTIMATED 1.3 MILLION LIVES

BETWEEN 1998 AND 2017

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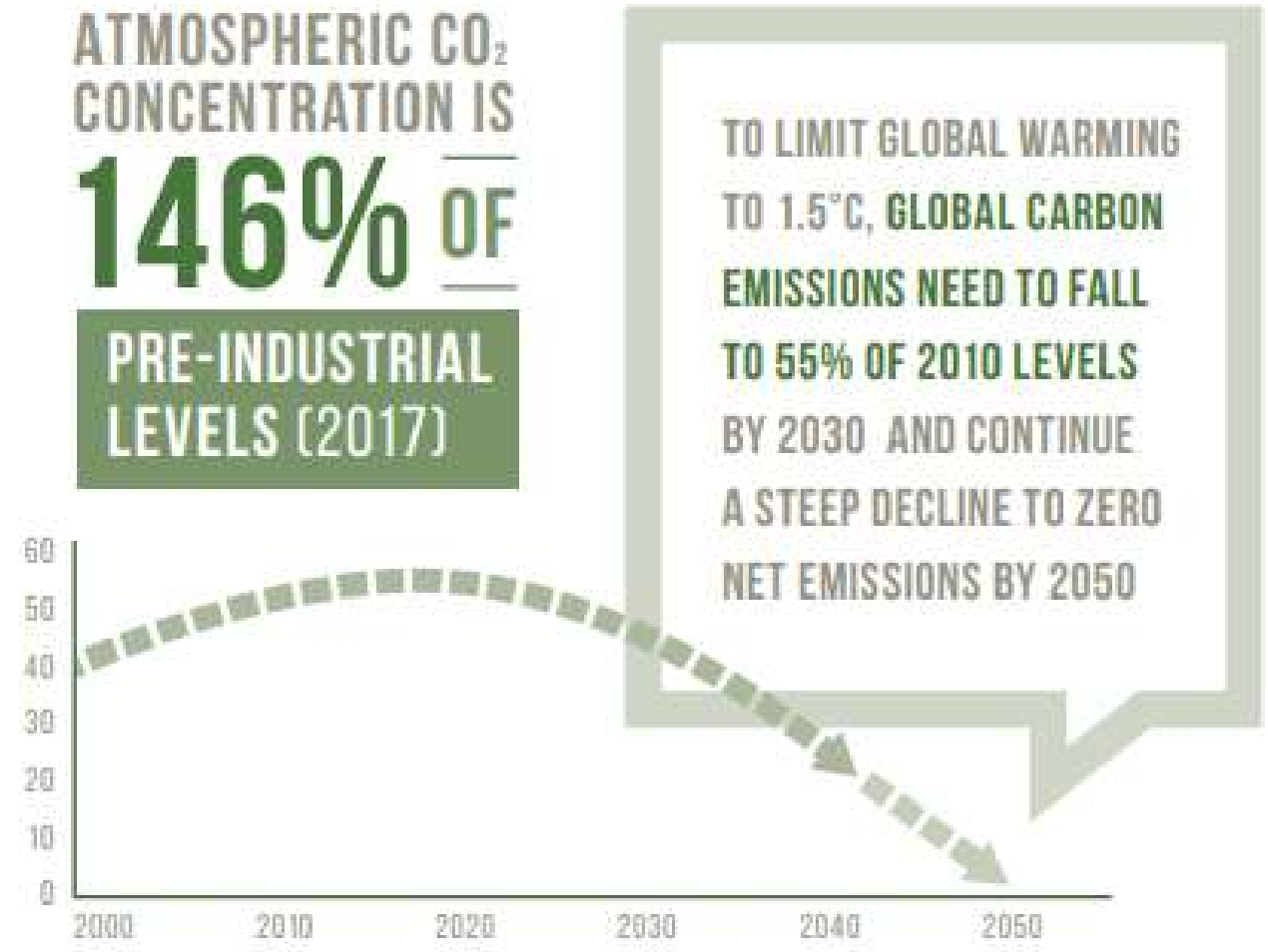

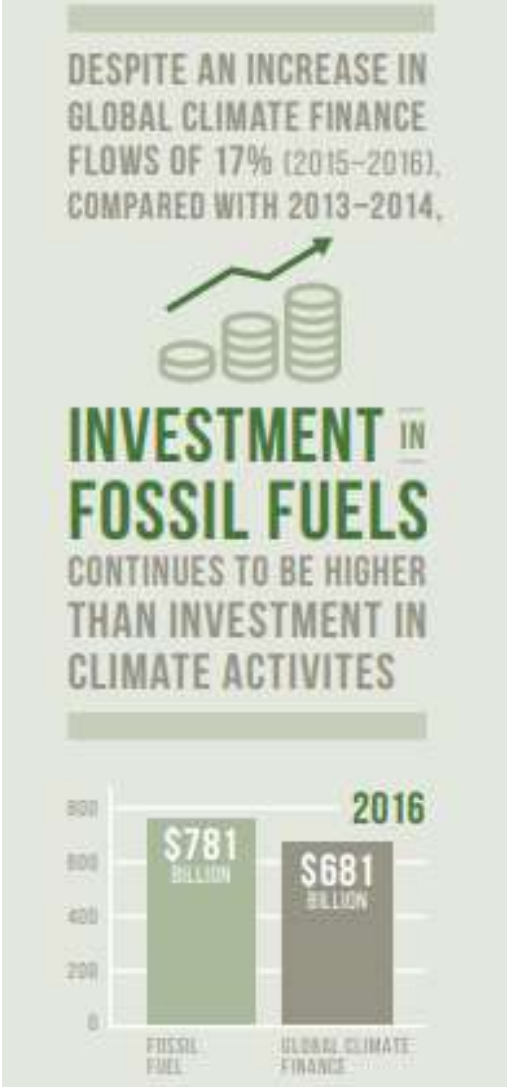

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Facts & Figures

•As of April 2018, 175 parties had ratified the Paris Agreement and 168 parties had communicated their first nationally determined contributions to the UN framework convention on Climate Change Secretariat.

•As of April 2018, 10 developing countries had successfully completed and submitted their first iteration of their national adaptation plans for responding to climate change.

•Developed country parties continue to make progress towards the goal of jointly mobilizing $100 billion annually by 2020 for mitigation actions.

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Facts & Figures

Thanks to the Intergovernmental Panel on Climate Change we know:

•**From 1880 to 2012, average global temperature increased by 0.85°C**. To put this into perspective, for each 1 degree of temperature increase, grain yields decline by about 5 per cent. Maize, wheat and other major crops have experienced significant yield reductions at the global level of 40 megatons per year between 1981 and 2002 due to a warmer climate.

•**Oceans have warmed, the amounts of snow and ice have diminished and sea level has risen.**From 1901 to 2010, the global average sea level rose by 19 cm as oceans expanded due to warming and ice melted. The Arctic's sea ice extent has shrunk in every successive decade since 1979, with 1.07 million km² of ice loss every decade

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Facts & Figures

•**Given current concentrations and on-going emissions of greenhouse gases, it is likely that by the end of this century, the increase in global temperature will exceed 1.5°C compared to 1850 to 1900 for all but one scenario**. The world's oceans will warm and ice melt will continue. Average sea level rise is predicted as 24 – 30cm by 2065 and 40-63cm by 2100. Most aspects of climate change will persist for many centuries even if emissions are stopped

•Global emissions of carbon dioxide (CO2) have increased by almost 50 per cent since 1990

•Emissions grew more quickly between 2000 and 2010 than in each of the three previous decades

•It is still possible, using a wide array of technological measures and changes in behavior, to limit the increase in global mean temperature to two degrees Celsius above pre-industrial levels

•Major institutional and technological change will give a better than even chance that global warming will not exceed this threshold

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Goal 13 Targets

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.2 Integrate climate change measures into national policies, strategies and planning

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

13.A Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

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Goal 13 Targets

13.B Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

*Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

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Links

- UN and climate change site
- UN Framework on the Convention on Climate Change
- World Meteorological Organization
- UN Population Fund
- UN Environment – Climate Change
- Intergovernmental panel on Climate Change
- FAO – Climate

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To find out more about Goal #13 and the other Sustainable Development Goals, visit:

http://www.un.org/sustainabledevelopment

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