

Each year, a distinguished speaker is invited to deliver the Grantham Annual Lecture to business-leaders, policymakers, entrepreneurs, academics, students and the public.

Read how some of these past speakers reflect on ten years of environmental and climate action achievements, and catch up with their lectures at [imperial.ac.uk/grantham](http://imperial.ac.uk/grantham)

# 10

## Grantham Institute's tenth anniversary year

Celebrating the past and looking to the future

The Grantham Institute promotes inter-disciplinary working to meet some of the greatest challenges faced by society. Over ten years, the Institute has built up successful programmes that drive forward discovery, convert innovations into applications, train future leaders and communicate academic knowledge to businesses, industry and policymakers to help shape their decisions.

**The Grantham Institute's vision is for a sustainable, resilient, zero-carbon society**

**The Institute seeks to achieve its vision by working in the following ways:**



Congratulations to the Grantham Institute on its tenth year in pursuit of a worthy goal of sustainable, resilient, zero carbon society.

**AL GORE, FORMER VICE PRESIDENT OF THE UNITED STATES  
2017 ANNUAL LECTURER**

I was honoured to give the 8th Grantham Lecture, I loved that so many students attended as they are our hope to motivate future generations to challenge climate change and injustice.

**MARY ROBINSON, FORMER PRESIDENT OF IRELAND  
2015 ANNUAL LECTURER**



It was an honour and pleasure to address the Grantham Institute due to its significance and all the people that contribute to its greatness.

**HIS SERENE HIGHNESS PRINCE ALBERT II OF MONACO  
2018 ANNUAL LECTURER**

The work that is being done by the Grantham Institute is absolutely key because it will keep countries moving forward understanding that decarbonisation is actually a huge opportunity.

**CHRISTIANA FIGUERES, FORMER EXECUTIVE SECRETARY OF THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE  
2016 ANNUAL LECTURER**



### Train

Empower future leaders through postgraduate training programmes



**187**  
PhD students on the NERC Science and Solutions for a Changing Planet Doctoral Training Partnership

**27**  
Nationalities represented

**60:40**  
Ratio of male and female students



**86**  
Master's students studying Climate Change, Management and Finance

**22**  
Nationalities represented

**51:49**  
Ratio of male and female students



### Innovate

Accelerate Cleantech innovation and low-carbon business start-ups



**80**  
New Cleantech businesses created



**\$140 million**  
Value of investment secured



**500**  
Number of new jobs created in Cleantech businesses



### Inform

Communicate knowledge to help inform and shape decision-making



**10**  
Grantham Annual Lectures



**44**  
Public lectures delivered by a distinguished expert



**35**  
Briefing Papers summarising evidence for non-scientific audiences



**5,889**  
Twitter followers



**13,295**  
Average monthly website views



### Research

Initiate, develop and support multidisciplinary research on climate change and environment



**205**  
Seminars presenting cutting-edge research



**610**  
Publications in peer-reviewed journals



**£0.5m**  
Average value of grants received per year to fund research



### Connect

Foster new collaborations and networks at Imperial and beyond



**173**  
Researchers in Grantham Affiliates programme



**108**  
Nationalities in Grantham Institute network



**1,895**  
Organisations in Grantham Institute network



**268**  
LinkedIn connections for Grantham Institute showcase page



**460+**  
Coffee mornings for students and staff



### Lead

Generate thought leadership on key research and societal issues



**7**  
Discussion Papers presenting thought-provoking reflections on topical issues



**202**  
Blogs on climate change and the environment by Imperial experts



**4,744**  
Average monthly blog page views

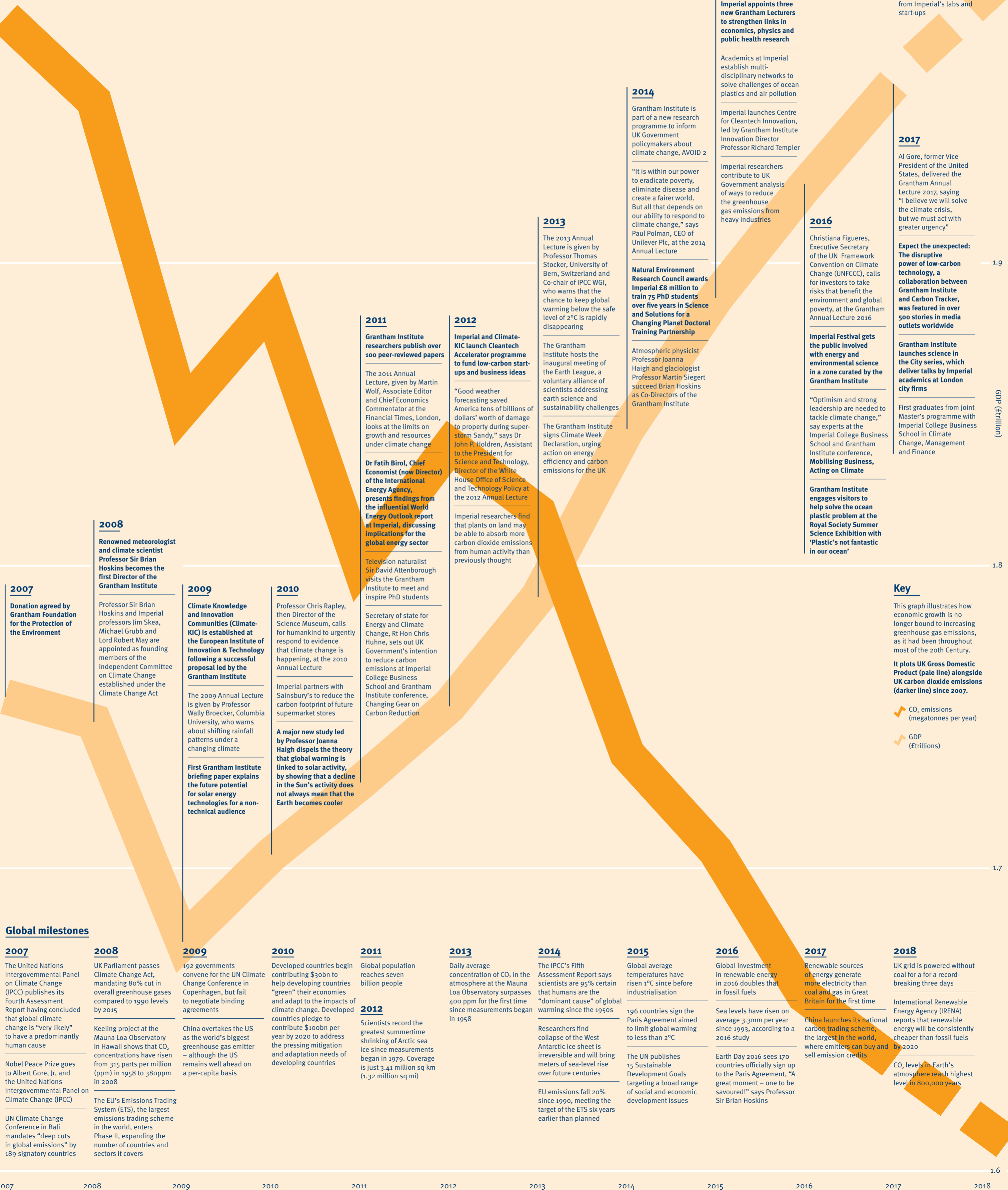
# A decade of difference

In 2007, the Grantham Foundation for the Protection of the Environment made the visionary decision to support an Institute at Imperial College London to provide a centre of excellence for research and education on climate change. Today, the Grantham Institute is established as a leading authority on climate and environmental science.

Over the next decade, as the international community strives to reduce greenhouse gas emissions and promote economic growth, environmental health and a decent standard of living for all, we will contribute to, and lead on the efforts needed to meet these ambitions.

To find out more and get involved with our work, visit [imperial.ac.uk/grantham](http://imperial.ac.uk/grantham)

## Grantham Institute milestones



## Global milestones

**2007**  
The United Nations Intergovernmental Panel on Climate Change (IPCC) publishes its Fourth Assessment Report having concluded that global climate change is "very likely" to have a predominantly human cause

**2007**  
Nobel Peace Prize goes to Albert Gore, Jr. and the United Nations Intergovernmental Panel on Climate Change (IPCC)

**2007**  
UN Climate Change Conference in Bali mandates "deep cuts in global emissions" by 189 signatory countries

**2008**  
UK Parliament passes Climate Change Act, mandating 80% cut in overall greenhouse gases compared to 1990 levels by 2015

**2008**  
Keeling project at the Mauna Loa Observatory in Hawaii shows that CO<sub>2</sub> concentrations have risen from 315 parts per million (ppm) in 1958 to 380ppm in 2008

**2008**  
The EU's Emissions Trading System (ETS), the largest emissions trading scheme in the world, enters Phase II, expanding the number of countries and sectors it covers

**2009**  
192 governments convene for the UN Climate Change Conference in Copenhagen, but fail to negotiate binding agreements

**2009**  
China overtakes the US as the world's biggest greenhouse gas emitter – although the US remains well ahead on a per-capita basis

**2010**  
Developed countries begin contributing \$30bn to help developing countries "green" their economies and adapt to the impacts of climate change. Developed countries pledge to contribute \$100bn per year by 2020 to address the pressing mitigation and adaptation needs of developing countries

**2010**  
Imperial partners with Sainsbury's to reduce the carbon footprint of future supermarket stores

**2010**  
A major new study led by Professor Joanna Haigh dispels the theory that global warming is linked to solar activity, by showing that a decline in the Sun's activity does not always mean that the Earth becomes cooler

**2011**  
Global population reaches seven billion people

**2011**  
Scientists record the greatest summertime shrinking of Arctic sea ice since measurements began in 1979. Coverage is just 3.41 million sq km (1.32 million sq mi)

**2012**  
Imperial and Climate-KIC launch Cleantech Accelerator programme to fund low-carbon start-ups and business ideas

**2012**  
"Good weather forecasting saved America tens of billions of dollars' worth of damage to property during super-storm Sandy," says Dr John P. Holdren, Assistant to the President for Science and Technology, Director of the White House Office of Science and Technology Policy at the 2012 Annual Lecture

**2012**  
Imperial researchers find that plants on land may be able to absorb more carbon dioxide emissions from human activity than previously thought

**2013**  
Daily average concentration of CO<sub>2</sub> in the atmosphere at the Mauna Loa Observatory surpasses the 400 ppm for the first time since measurements began in 1958

**2014**  
The IPCC's Fifth Assessment Report says scientists are 95% certain that humans are the "dominant cause" of global warming since the 1950s

**2014**  
Researchers find collapse of the West Antarctic ice sheet is irreversible and will bring meters of sea-level rise over future centuries

**2014**  
EU emissions fall 20% since 1990, meeting the target of the ETS six years earlier than planned

**2015**  
Deprived and ethnic minority areas are the worst affected by air pollution within the UK, according to a new study by Imperial researchers

**2015**  
Global average temperatures have risen 1°C since before industrialisation

**2015**  
196 countries sign the Paris Agreement aimed to limit global warming to less than 2°C

**2015**  
The UN publishes 15 Sustainable Development Goals targeting a broad range of social and economic development issues

**2016**  
Academics at Imperial establish multi-disciplinary networks to solve challenges of ocean plastics and air pollution

**2016**  
Imperial launches Centre for Cleantech Innovation, led by Grantham Institute Innovation Director Professor Richard Templar

**2016**  
Imperial researchers contribute to UK Government analysis of ways to reduce the greenhouse gas emissions from heavy industries

**2016**  
Christiana Figueres, Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), calls for investors to take risks that benefit the environment and global poverty, at the Grantham Annual Lecture 2016

**2016**  
Sea levels have risen on average 3.3mm per year since 1993, according to a 2016 study

**2016**  
Earth Day 2016 sees 170 countries officially sign up to the Paris Agreement, "A great moment – one to be savoured!" says Professor Sir Brian Hoskins

**2017**  
AI Gore, former Vice President of the United States, delivered the Grantham Annual Lecture 2017, saying "I believe we will solve the climate crisis, but we must act with greater urgency"

**2017**  
Renewable sources of energy generate more electricity than coal and gas in Great Britain for the first time

**2017**  
China launches its national carbon trading scheme, the largest in the world, where emitters can buy and sell emission credits

**2017**  
First graduates from joint Master's programme with Imperial College Business School in Climate Change, Management and Finance

**2018**  
His Serene Highness Prince Albert II of Monaco delivered the Grantham Annual Lecture 2018 on how climate change is a threat to our oceans

**2018**  
Four new Grantham Lecturers appointed in chemistry, physics, environmental policy and earth science

**2018**  
Greener Futures Zone at Imperial Festival introduces the public to the latest inventions from Imperial's labs and start-ups

**2018**  
Expect the unexpected: The disruptive power of low-carbon technology, a collaboration between Grantham Institute and Carbon Tracker, was featured in over 500 stories in media outlets worldwide

**2018**  
Grantham Institute launches science in the City series, which deliver talks by Imperial academics at London city firms

**2018**  
CO<sub>2</sub> levels in Earth's atmosphere reach highest level in 800,000 years