

Edinburgh International Science Festival wants you to remember Earth Hour

✖ Around the globe, millions of people, businesses, and landmarks set aside an hour to host events, switch off their lights, and make noise for climate change action. This year Earth Hour is at 8:30pm on 25 March 2017.

Coordinated by WWF and other volunteer organisations, people shine a light on the need for action on climate change. Earth Hour is more than an event. It is a movement. Over the last 10 years, it has achieved massive environmental impact.

When it begins on 1 April

Edinburgh International Science Festival will highlight the issues connected to climate change through a series of thought-provoking events:

Greening the Developing World, 6 April

How do we support the developing world to become more sustainable without creating a negative impact? Join a panel of experts including researcher E Feng Tan Loh from the Grantham Institute as they discuss the importance of clean tech and renewable energy provisions in helping these economies to not only grow, but to avoid adding to our current climate situation.

Icy Worlds and the Challenges of Climate Change – Meet the Scientists, 2 and 3 April

Come and meet polar scientists from the University of Edinburgh whose research aims to uncover the secrets of our changing world. Discover how they live and work in the

beautiful yet hostile polar environments, and explore how polar research is helping us understand and manage the changes and challenges we face in exciting hands-on activities and demonstrations.

Predicting the Effects of Climate Change by 2100, 3 April

When it comes to climate change, the question is no longer *is it happening?* but *how quickly is our planet changing?* and by how much will it change due to carbon emissions? Many experts are convinced that we have already passed a tipping point, and climate change is now inevitable. They worry that the recent rise in climate scepticism in the media will hamper efforts to limit carbon emissions. But what might life on earth might be like at the end of the century?

Join experts in their fields including Prof Murray Roberts (University of Edinburgh) a marine biologist who is co-author of the UN 2014 report on the impacts of ocean acidification on marine biodiversity and the 5th IPCC climate change assessment; Prof Dorrik Stow (Heriot-Watt University) a geologist with expertise in past climates; and Dr Phil Williamson (University of East Anglia) coordinator of the UK ocean acidification programme and recent target of a climate denier smear campaign to uncover the issues at hand.

The Bleeding Edge, 12 April

Does technology turn toxic in an unequal world? Capitalism likes us to believe in the steady, inevitable march of progress but the historical record tells of innumerable roads not taken, all of which could have led to better worlds. Join author of *The Bleeding Edge* Bob Hughes as he explores the latest discoveries about the effects of social inequality on human health and our environmental impact, and traces today's ecological crisis back to the rise of the world's first elites, 5,000 years ago.

The Cabaret of Dangerous Ideas: Climate Change in a Connected

World, 8 April

Hosted by resident MC Susan Morrison, this special edition of The Cabaret of Dangerous Ideas will bring together academics, activists and comedians to pitch their visions of the future, explaining their views on the impact of climate change and their predictions for human interaction in our increasingly connected world. Expect debate, discussion and discourse with some of the fiercest intellects Scotland has to offer. Panellist include:

- Susan Morrison, Comedian (Chair)
- Subramanian Ramamoorthy, Academic, University of Edinburgh (Informatics)
- Ellie Harrison, Activist, The Glasgow Effect
- Elizabeth Bomberg, Academic, University of Edinburgh (SPS)

The Penguin Counters: Special Show Dome Event, 14 April

The Penguin Counters is a cinematic experience documenting the research of Ron Naveen and his team in Antarctica. Their work tracks the impact of climate change and ocean health on penguin populations and asks what humans can learn from penguins' survival at the frontline of climate change in the world's fastest warming region. Join us in the bar for refreshments before this special screening, which will be followed by a Q&A with the film's production team.

Tundra shrubs – Arctic time machines, with Sandra Angers-Blondin, 12 April

The Arctic is currently changing more rapidly than anywhere else on planet Earth, and scientists have a strong motivation to better understand its past in order to predict its future. As the Arctic warms with climate change, multiple lines of evidence indicate that plants are responding, including greater shrub growth in years with warmer summers. Join us as we prepare thin sections of wood from tundra shrubs in order

to track past events in the annual growth records of the 'trees of the tundra', also known as shrub rings. You will be invited to mount, examine and photograph the thin sections under the microscope and discuss the concepts of time and change with researchers from the University of Edinburgh.