ENERGY FOR HUMANITY

IS A NEW VOICE FOR THE ENVIRONMENTAL MOVEMENT

A new NGO working to meet the goal of universal access to clean and cheap energy
IN 2013, THE DOCUMENTARY FILM PANDORA’S PROMISE SHATTERED THE LONG-STANDING TABOO AGAINST DISCUSSING NUCLEAR ENERGY AS AN ENVIRONMENTAL POSITIVE.

The film created a safe space for nuclear supporters to speak out, and shifted the discourse on nuclear energy.

The success of Pandora’s Promise illustrates a tremendous gap in the nuclear education & advocacy space – the need for a strong, independent voice articulating the need for nuclear. With enthusiasm from Pandora’s Promise still high, but the film’s campaign coming to a close, Film Director Robert Stone, Daniel Aegerter and campaigner, Kirsty Gogan co-founded Energy for Humanity (launched in October 2014), to fill that gap.
Kirsty Gogan, Co-Founder, Executive Director

Kirsty Gogan, Co-Founder, Executive Director, is an established expert in climate and energy communications with extensive experience as a senior advisor to UK Government, industry, academic networks and non-profit organisations. She created the Low Carbon Alliance between the nuclear and renewables industries, representing more than 1,000 businesses and welcomed by Greenpeace. Leading the Government’s public consultation into the UK’s new build program she addressed public concerns about nuclear power and engaged anti-nuclear campaigners in a constructive dialogue process with Government that continues to this day. As Deputy Head of Civil Nuclear Security, Kirsty reviewed the UK national communications response to Fukushima. Kirsty created the first UK chapter of the global Women in Nuclear network, is a visiting researcher at Manchester University, and an independent advisor to Government.
Daniel Aegerter, Co-Founder, is an investor and philanthropist. Daniel is Chairman and Founder of ARMADA Investment AG, established after the successful merger of his software company TRADEX Technologies to Ariba in March of 2000. It was one of the largest software acquisitions at the time. Daniel’s entrepreneurial spirit and ability to drive strategy to execution are the key drivers for his business success. As Chairman and CEO of TRADEX from inception to exit, Daniel set the strategic direction and product vision for the company; attracted a strong management team; raised venture capital; and drove focused execution. Over the last decade at ARMADA, Daniel worked with many entrepreneurs to help them reach their goals and execute their business plans. He is a hands-on investor and both challenges and supports management to be their best. Daniel has been a member of the World Economic Forum since 2002. Daniel believes in the future of nuclear energy and has made some investments in promising early stage advanced nuclear start-ups. As a philanthropist, Daniel is committed to finding new ways to power modern civilisation without destroying it. Changing the narrative around nuclear could allow us all to live energy rich lives while protecting the planet. To me this is the most compelling philanthropic endeavour.
Robert Stone, Co-Founder, is an Academy Award nominated documentary filmmaker. Four of his films have had their world premiere at the Sundance Film Festival and seven of his films have been aired on the acclaimed PBS history series American Experience. His most recent feature documentary is “PANDORA’S PROMISE” which premiered at Sundance in 2013, was released theatrically and broadcast on CNN. This hotly debated film that makes the environmental case for nuclear energy has taken Stone all over the world and made him a much sought after public speaker on the issues of climate change and public attitudes about energy.

In 20 years from now I want to be able to look my children in the eye and say: I did everything I could. There was no technology I didn’t look at seriously, and support, to solve climate change.
Fear of nuclear power is rooted in the legitimate fear of atomic weapons and nuclear fallout from bomb tests. These fears are carved deep into our hearts and helped launch environmentalism. Now, decades on we see that a phobia of nuclear power has led to a coal-based energy policy.

Today, the majority of mainstream environmentalists insist that nuclear power is not needed to meet our climate goals. The goal of meeting our global energy needs with close to 100 per cent renewables may be technically feasible. However, real world challenges of scalability, cost and time to implementation, combined with the urgent timescales necessary to avoid catastrophic climate change, make this aspiration an exceptionally high-risk strategy.

Nuclear power is a contentious issue. Four leading climate scientists, including James Hansen, entreated environmental leaders to support advanced nuclear power in light of climate change. With more advanced, mass-producible, inherently safe reactor designs there’s a very real promise of safely, rapidly and affordably replacing fossil fuels with clean energy (not only for electricity generation, but also for industrial heat, desalination and transport) within the time we have left to solve this problem.

It is for this reason that we co-founded Energy for Humanity, a new environmental NGO aimed at creating a new conversation about energy and climate change. Since our launch in October 2014, we have given speeches around the world, and developed partnerships with the media, scientists, academics, leaders and civil society organisations, particularly in Europe and the United States. We are apolitical, independent from industry and funded entirely by philanthropic donations.

Our main goal is to create an evidence-based debate, aligned with the conclusions of the Intergovernmental Panel on Climate Change and other scientific studies and institutions: that a massive expansion of nuclear power is vital if we are serious about transitioning from fossil fuels. To oppose nuclear at every turn is to gamble with our climate and our future.
OUR VALUES

• Global in scope.

• Optimistic, pragmatic, & pro-technology.

• Profoundly committed to improving quality of life for all people.

• Not affiliated with any political party, industrial or corporate enterprise.

OUR OBJECTIVES

We have three objectives.

1 Grassroots engagement, myth busting and educating. Creating and curating beautiful, accessible, shareable online content.

2 To influence decision makers, opinion formers and influencers. Engaging at senior levels, via face-to-face meetings, events and conferences and through written submissions to influence the climate and energy debate.

3 To make safer, rapidly scalable, and proliferation-resistant nuclear energy systems available and affordable – especially in the energy-starved developing world.
May to October 2014

Development Phase

Developing the organisational strategy and website
www.energyforhumanity.org
and animated microsite
www.weloveelectricity.org.

Speaking at events and engaging stakeholders.
Kirsty joined the Communications Panel from the International Youth Nuclear Congress in Burgos, Spain - July 2014. Suzy Hobbs Baker chaired the event and other panellists included Ben Heard, David Hess, Valerie Faudon, and Felix Meissner.

A video of this event is available to watch here.

Kirsty co-authored a new report
In the Public Eye: Nuclear Energy and Society, which was presented to (and well received by) the Nuclear Industry Council (co-chaired by Secretary of State for Energy and Climate Change Edward Davey and Lord Hutton). The report outlines a high level strategy for Government and other stakeholders to work together to strengthen public confidence in nuclear power as part of a low carbon energy mix, and highlight societal benefits of nuclear energy in terms of electricity generation, jobs and the economy. It is published on the UK Government website here.

Energy for Humanity ran the Pandora’s Promise Social Media Accounts
(Alexandra Tweedie)

- Combined Twitter & Facebook following more than 12K
- Facebook Page “likes” (fans/follows) have increased by 34% since January 2014, to almost 9,600
- Twitter followers have increased by 47% since January 2014, to almost 2,500
- Reach/Impressions of Top Posts
- Top 5 Facebook posts combined reached 100K people, of which about 80% were non-fans
- Top 5 Tweets (for which “impression” data is available) combined reached 16K people
October
Launch Phase

Kirsty gave the keynote address at the national US event Nuclear Science Week (NSW) hosted at the Pacific Science Centre in Seattle on October 16/17.

A video of Kirsty’s keynote address is available to watch [here](#).

The nuclear science week hash tag achieved 731k impressions (see below).

Kirsty is now a member of U.S. national NSW steering group. She has developed links between US/UK national labs, companies and other institutions, including the NSW lead organisation, the Smithsonian Museum of Nuclear Science. As a result, the UK now plans to host a NSW affiliated national conference in the week before the US event (at Oakridge National Laboratory) in October 2015. Energy for Humanity has been invited to join this platform.

The nuclear science week hash tag statistics
KEY ACTIVITY & ACHIEVEMENTS: YEAR 1

November

Kirsty represented the UK at an International Atomic Energy Agency technical meeting in Bristol and presented the EFH concept to international delegates.

Kirsty was quoted in the Sunday Times article “Just 16 years to avoid carbon calamity, say experts.”


January

Daniel Aegerter held meetings and discussions with a wide range of senior delegates at the World Economic Forum meeting in Davos and distributed Energy for Humanity literature outlining the case for rapid development and deployment of advanced reactor technology to tackle climate change and rising energy demand.

EFH invited to make formal submissions to the WEF Global Agenda Council on Decarbonising Energy.
February

EFH co-hosted the Global Nuclear Initiative meeting together with the Clean Air Task Force, Energy Options Network and Alvin Weinberg Foundation, (venue & refreshments kindly donated by Burgess Salmon in the City of London). Invited experts reviewed a “Global Nuclear Initiative” proposal.

The Global Nuclear Initiative set out some potential goals, milestones and benchmarks towards a high-nuclear-energy world. It then posited activities that might get us there, classified into four areas: technology innovation; non-proliferation; safety; and public education – and what organisations (governmental and non-governmental) are currently covering those spaces. Finally, the document envisioned a potential coordinating effort – a “Global Nuclear Initiative” -- that augments, assists and cross-fertilizes these activities, especially with regards to potential for cost reduction, demonstration sites and international licensing. We are delighted that as a result of this engagement, Armond Cohen, Executive Director of the Clean Air Task Force and our partner on the Advanced Nuclear Initiative, has been invited to join the Global Agenda Council.

EFH submitted an overarching response outlining the high level case for accelerated development and deployment of advanced reactor technology, together with six submissions representing a wide variety of technologies including fast reactors, molten salt, small modular, and micro reactors. This led to further detailed discussion and introductions, especially with regards to potential for cost reduction, demonstration sites and international licensing.

Energy for Humanity Social Media Reach Update (February 2015)

- In May 2015 the website had been viewed 27k times (since October launch).
- Our Facebook page achieved 107.2K reach on launch day (5 November).
- New content, including infographics, audio, video and articles regularly posted on the website and via social media (Twitter and Facebook).

EFH has ensured that advanced reactors are firmly on the agenda for the World Economic Forum Global Agenda Council on Decarbonising Energy.
March

Kirsty was invited to give a keynote talk to the Department of Energy Nuclear National Innovation workshop organised by the Idaho National Lab. The 2015 Nuclear Innovation Workshop is part of a group of six simultaneous regional workshops; each centered at a regional university and focused on innovation in support of nuclear energy. The overall objective of the set of workshops was to provide a single, consolidated report that summarizes all of the regionally focused technical discussions with specific recommendations to the Department of Energy’s Office of Nuclear Energy (DOE-NE) for enhancements or additions to Research Development & Demonstration (RD&D) programs. Kirsty’s Nuclear Innovation talk is available here.

- 4 million interactions on Twitter.
- An Associated Press article about the events ran in at least 150 news outlets in 31 states and 6 countries. Publication of the article included the New York Times, the Washington Post and ABC News.
- The level of public dialogue surrounding the workshops is a positive indicator that the recommendations of the event are timely and socially supported.
- Energy for Humanity Switzerland launched on 4th March 2015 with 25 members.
- Urs Bolt appointed as President of EFH Switzerland.
- Hosted two sold-out screenings of Pandora’s Promise in Zurich.
- Robert Stone Q&A via Skype.
April

Pandora’s Promise screening at Columbia University with Q&A hosted by Andy Revkin of the New York Times, introduction by Nabuo Tanaka, keynote by Bill Nye, “the Science Guy” and panelists Gernot Wagner and Robert Stone. People queued around the block and 800 tickets were sold. A straw poll before and after the event suggested that almost everyone in the audience changed their minds in support of nuclear as a result of the film and Q&A.

Kirsty has been appointed as an International Atomic Energy Authority expert lecturer. Kirsty’s first IAEA mission will be to join a technical meeting in Kenya, focused on “newcomer” countries.

EFH Switzerland went online on social media (Facebook, Twitter)

May

Kirsty joined the panel at Glasgow Science Centre event: Powering the Future.

EFH Switzerland meeting with a lecture about nuclear technology evolution and outlook by Boris Hombourger

Private workshop to discuss Switzerland’s energy strategy
June

Kirsty gave a keynote speech to the European Young Generation Forum in Paris.

EFH Swiss site went live

First monthly Third Thursday meet-up in Zurich

July

LinkedIn-page published
Kirsty currently sits as an independent expert on three UK Government steering groups for public dialogue and stakeholder engagement around nuclear. These are focused on:

1. Proposed siting of a geological disposal facility
2. Generic design assessment for the Horizon ABWR reactor

**WHATS NEXT?**

**Energy for Humanity**

Working with partners across our global network of civil society groups, Energy for Humanity will continue to develop content, strategy and messaging to support grassroots education and advocacy, create new opportunities to engage decision makers and influencers, and to help make safer, rapidly scalable, and proliferation-resistant nuclear energy systems available and affordable – especially in the energy-starved developing world.

If advanced reactors can be deployed safely, securely, rapidly and at scale, alongside renewable energy and increased efficiency, the world will be a richer, more equitable place and less vulnerable to catastrophic climate change. Please get involved, support our work and spread the word!
How to power our planet responsibly is a critical question of our time. Let me outline my reasoning for why I am convinced that we need nuclear energy to rise to this challenge.

The first question we have to ask is whether we can reasonably conclude based on all available evidence that we are witnessing manmade climate change? Clearly, the climate scientists have reached an overwhelming and irrefutable conclusion on this issue, even though predicting the pace and magnitude of change remains unclear, as with any prediction about the future. So we have a problem. Given that the most severe scenario results in an extinction event; we have to act - even if there is only a small probability assigned to this scenario – anything else is irresponsible.

Humanity has evolved in its energy sources and fortunately the days of using slaves as the primary means of energy production are firmly behind us. Over the last centuries a clear link has been established between energy availability and quality of life. Fortunately, in Switzerland, we are one of just six countries in the world that already emit the less than 100 grams of CO2 per kilowatt hours of electricity generated. Energy efficiency has a role to play and I fully support market based efforts to improve it. I love my Tesla, and my energy costs are 80% lower than for my previous car. So while we can save lots of electricity, for example by switching to LED’s, we will still need to continue to increase electricity generation in order to electrify transport (and we absolutely should do that). Electricity is the best form of energy. It should become our main source at the expense of fossil fuels, especially coal, which is the most harmful energy source both in terms of carbon and toxic pollution. Our uses for electricity continue to grow. Twenty years ago we didn’t have the internet or electric cars. Already the internet consumes about 8% of our electricity and in twenty years our factories will be even more automated.

In addition, there are still billions of people who deserve a larger energy footprint to buy a washing machine, refrigerator or air conditioner, and feel safer and more secure with services like mains water sanitation and street lighting. We call our organization Energy for Humanity, because I believe that we need to look at this on a global scale. Worldwide electricity consumption is growing by an equivalent to the annual electricity consumption of Brazil each year. This is good news. Access to electricity should continue to grow to
enable more people to enter the middle class and lead safer, more secure energy rich lives.

Therefore our biggest priority is finding ways to decarbonise our electricity generation. For this, we need all of the safe, reliable and competitive electricity sources available and we should look to learn from best practices. The only major industrial nation to have successfully decarbonised a fossil-fuel based electric grid is France. In just 11 years, from 1979 to 1990, France went from 20% nuclear to 80% nuclear, whilst their electricity consumption also doubled during this period. Of course, many believe that this transition can be better achieved with highly subsidized renewables that can only produce energy intermittently. This has not yet been proven and the German Energiewende demonstrates that it is not possible for a major industrialised economy to exit nuclear and coal at the same time. With about €200 billion in paid subsidies and committed liabilities, German carbon output has risen considerably. Coal fired plants continue to supply 45% of German electricity production and 10 GW of new lignite coal plants are being planned and built. This is not about nuclear versus renewables.

Coal is our common enemy. Coal is both the largest energy source and the most polluting, yet it remains the fastest growing worldwide. And meeting rising global energy demand is only half the battle. We also need to shut down and replace vast terawatts of existing coal plant capacity around the world. It seems obvious that variable renewables can’t do that alone, within such urgent timescales and at a financeable cost.

These global challenges are already unprecedented in their scale and magnitude. Without nuclear power, it may not possible. Wouldn’t it be irresponsible if we didn’t continue to support the development of new advanced nuclear technologies at least as an insurance policy?

We don’t have to love nuclear energy, but we can accept that it works and could power our planet safely with carbon free electricity. In addition, the innovation potential is enormous in the decades ahead. Today’s nuclear plants extract around 3 per cent of the available energy in uranium. Modern reactor designs will extract more than 85 per cent. As well as being ‘walk-away safe’ cheaper and simpler to manufacture at scale, many of these new reactors will solve the existing waste problem by using it as fuel.

The truth is that successful opposition to nuclear power has led to a coal based energy policy that now threatens the stability of our global climate upon which life depends. In light of this, many leading environmentalists are looking again at nuclear power. I hope you will join this conversation. Please do talk to your friends and colleagues about these issues. Support Energy for Humanity and join forces with us to end the reign of old king coal and create a safer, more secure world, less vulnerable to impacts of catastrophic climate change.
We are hugely grateful to our friends, allies, contributors and advisors, especially the following individuals: Simon and Irene Aegerter; Anthony Alexander; Todd Allen; Roman Andermatt, Suzy Hobbs Baker; Ivan Baldwin; Mike Berkowitz; Adrian Bull; Tom Blees; Urs Bolt; Peter Carter; Joe Chaisson; Armond Cohen; Leslie Dewan; John Durham; Tracey Durning; Valerie Faudon; Ashley Finan; Patrick Frick; Ben Gilliland; Jeremy Gordon; Jayne Hallett; Michael Hanlon; Ben Heard; David Hess; Sunny Hundal; Eric Ingersoll; Sorrell Kinton; Alexandra Kaufman; Mark Lynas; David Martin; Mark Massie; Reto Muller; Rory O’Neill; Cesar Penafiel; Jane Pickering; Anthony Scaramucci; Andrew Sherry; Ian Scott; Tim Stone; Stephen Tindale; Suzanne Waldman; Jim Walther; Baroness Worthington; Martin Wright. We would like to offer thanks and solidarity to our colleagues at The Clean Air Task Force, Energy Options Network, Pritzker Innovation Fund, The Breakthrough Institute, Third Way, ThinkClimate Consulting and the Alvin Weinberg Foundation for your hugely valuable contributions in forging new ways of thinking about and solving our most wicked global environmental and social challenges. Finally, thank you for the hard work of the core EFH team: Alexandra Tweedie, Jean Kemp, and Dom Whooley, who together developed the design, concept and content for both the main website and microsite.

Thanks especially to leadership and support from Daniel Aegerter, EFH was co-founded in April 2014.