

CLIMATE PHILANTHROPY AFTER PARIS

The landmark Paris Agreement, adopted on 12 December 2015, is central to global efforts to combat climate change. What contribution should philanthropy make to these efforts? We present the latest science and data on climate philanthropy. The first section, edited by Michael Northrop, highlights the opportunities for philanthropy to consolidate the achievements at Paris especially in re-forestation, renewable energy and cities. The second section, edited by Nnimmo Bassey and Terry Odendahl, delves between the gaps to document the ways in which philanthropy must focus on climate justice and the needs of the most marginalized. The final section presents perspectives on divesting assets from fossil fuels and ends with a shared view from guest editors on the journey ahead.

Guest editors for this *Alliance* special feature



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Climate science **Stefan Rahmstorf**

Global temperature and sea levels are rising. Glaciers and ice sheets are shrinking. Devastating droughts, floods and heat waves occur ever more frequently, often hitting the poorest and most vulnerable populations most severely.



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The basic physics of global warming have long been understood. In 1965 US president Lyndon B Johnson's scientific advisory committee warned that releasing carbon dioxide into the atmosphere would lead to higher global temperatures causing ice caps to melt and sea levels to rise. 'Man is unwittingly conducting a vast geophysical experiment,' warned the scientists. 'Within a few generations he is burning the fossil fuels that slowly accumulated in the earth over the past 500 million years . . . the climatic changes that may be produced by the increased carbon dioxide (CO₂) content could be deleterious from the point of view of human beings.'

From Rio and Kyoto . . .

After decades of further discussion, practically all nations finally acknowledged the seriousness of the threat at the Earth Summit in Rio in 1992 and vowed to prevent what was described as a 'dangerous anthropogenic interference with the climate system'. In 1997 the Kyoto protocol was adopted in which industrial nations committed to reducing their emissions by 5 per cent by the year 2012. This was overachieved (by 2012 the collective emissions of these countries were 22 per cent lower than in 1990), but rapidly growing emerging economies like China meant that global CO₂ emissions continued to increase unabated, and atmospheric CO₂ concentrations crossed the line of 400 ppm for the first time in millions of years.

. . . to Paris

In December 2015, 195 nations unanimously passed the Paris Climate Agreement, which involves nearly all nations in a joint effort to halt global warming well below 2 °C. While that is likely a historic breakthrough, the problems are far from solved. The

emissions commitments made by individual countries add up to only about half the reductions needed to stop global warming below 2 °C. And implementing even those modest commitments is a huge challenge, facing powerful resistance from interested parties that fear to be losers in the energy transition.

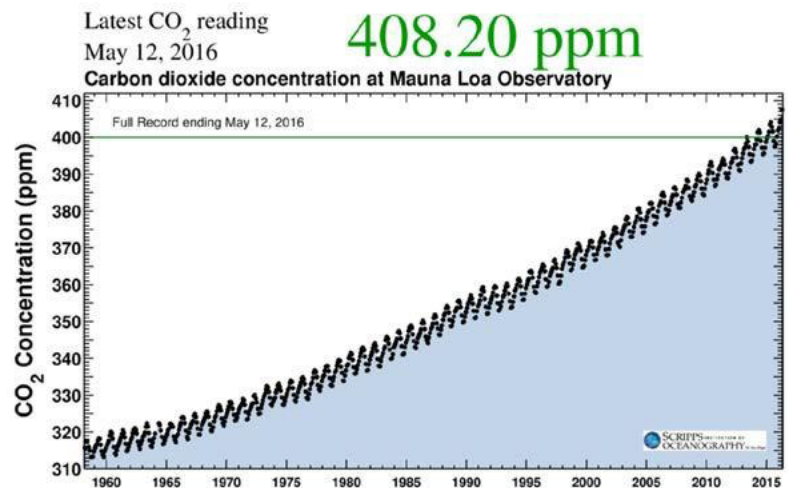
Climate change denial in the face of human-made global warming

For decades, interest groups have been conducting a relentless public relations campaign to sow doubt about climate science. This confusion campaign has been largely successful, in that the general public is generally unaware of the fact that a near-unanimous consensus (around 97 per cent) exists among working climate scientists about the predominantly human causes of global warming.

Scientists have known since the 19th century that carbon dioxide is a greenhouse gas which naturally helps to keep our planet warm enough for life to thrive on earth. Increasing its abundance in the atmosphere will lead to warming surface temperatures. The amount of CO₂ in the atmosphere is increasing steadily as demonstrated by many measurements, eg on Mauna Loa in Hawai'i, the famous Keeling curve (Figure 1). There is no scientific doubt that this increase in atmospheric CO₂ is entirely human-caused. Its isotope composition gives away the fossil origin of the extra CO₂, and a simple budget calculation shows that the amount of fossil carbon we have dug up from the earth's crust and added to the atmosphere is in fact more than enough to account for the full increase. Some of the added carbon is taken up by forests and more is absorbed by oceans. In ocean waters, CO₂ forms carbonic acid and causes the ocean waters to become more acidic, a serious issue in itself which threatens marine life.

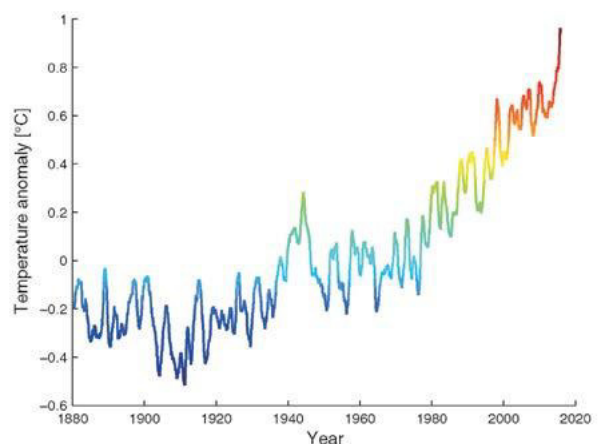
Sea ice cover on the Arctic Ocean has been shrinking dramatically over the past decades.

Figure 1 The carbon dioxide concentration in the atmosphere displays a seasonal cycle due to the 'breathing' of the biosphere as well as an upward trend due to human-caused emissions.



The climatic effect of the rising CO₂ concentration as well as some other greenhouse gases can be calculated in two steps: first, the 'radiative forcing' is computed. Then this is translated to a warming of global surface temperatures accounting for various feedbacks such as water vapour and cloud. How sensitively the surface temperatures respond can be determined using climate models or derived from past natural climate variations in earth's history. Both approaches give consistent results. They demonstrate that a doubling of CO₂ concentrations will lead to global warming of around 3 °C.

Figure 2 Global average temperature from 1880 up to March 2016. Data from NASA shown as 12-month running means. The anomalies are relative to the baseline period 1951–80.



Fully consistent with the radiative forcing that we have caused thus far, global temperature has risen by about 1°C until now (Figure 2). As the Intergovernmental Panel on Climate Change (IPCC) has documented in detail, the natural contribution to global temperature change can be constrained to being in the range of -0.1 to $+0.1^{\circ}\text{C}$ since 1950. Humans are without doubt the dominant cause of modern global warming.

Effects of global warming

Melting glaciers and ice sheets

One clearly visible consequence of this warming is the loss of ice: mountain glaciers are shrinking, the huge ice sheets on Greenland and Antarctica are haemorrhaging mass at an accelerating rate, and the summer sea ice cover of the Arctic Ocean has shrunk by almost half in recent decades.

Rising seas

As warming waters expand and continental ice is lost, an inevitable result is a rise in sea levels. Sea levels have increased by nearly 20 cm in the last 100 years, the largest rise of any century in recent history. Currently, the sea level is rising at over 3 cm per decade and is expected to rise by up to a meter by the end of the century. Even if global warming is stopped at 2°C , sea levels will probably keep rising by several meters in subsequent centuries in a delayed response. There is enough ice on earth to

Unless global warming is stopped well below 2°C , adverse climate impacts will transform our home planet causing human suffering and tragedy for many millions. Halting global warming at a manageable level is now a race against the clock.

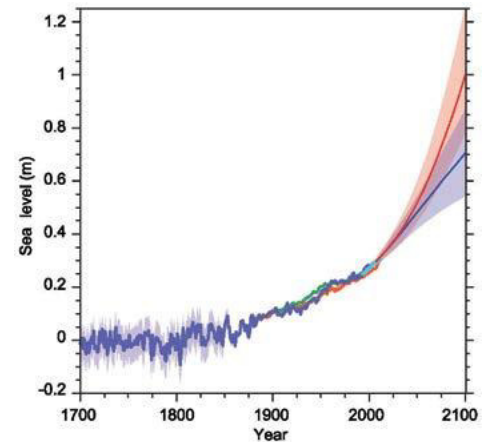
Flooded road on the island of Reichenau in Lake Constance, Germany, during the flooding of June 1999.



raise sea levels by over 60 meters. Many coastal cities and low-lying islands will probably be lost.

Figure 3 Sea level from 1700 AD until 2100 AD. The red scenario for future rises assumes high future emissions, while the blue scenario assumes successful climate policies that limit global warming to 2°C .

Source: adapted from IPCC 5th Assessment Report



Loss of plant and animal species

With unmitigated warming, global temperatures would reach a high not seen for millions of years. This rise would be much too fast for many plant and animal species to adapt. Many species are already affected by global warming and a large fraction – up to one third – could be doomed to extinction by the year 2050.

Fires, floods and heat waves

Extreme weather events are already on the rise due to global warming. New monthly heat records are now set five times as often as they would be just by chance in a stable climate. This means that the majority of lasting heat waves are already caused by humans. In a warmer climate, the risk of extreme flooding events increases as warmer air can hold more water. Droughts and forest fires are likely to increase. This is currently occurring in the Mediterranean region, Southern Africa, California and Canada. Hurricanes are expected to become more destructive. Harvest failures threaten food security and political stability in vulnerable countries.

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Foundation spending on climate change

Climate change is arguably the most serious, systemic and far-reaching issue we face as the human race. How much are foundations spending to address it? Looking at data from the US, the UK and Europe, it seems that somewhere between 0.8 per cent and 2.2 per cent of total foundation spending is directly addressing climate change.

For US and UK foundations, climate philanthropy is around 2% of overall foundation spending.

In the US

According to the Foundation Center, climate change-related grants by US foundations account for 0.8 per cent of all foundation spending.¹ When three separate subcategories – ‘Climate and atmosphere’, ‘Energy’ and ‘Transportation’ – are incorporated into an overall ‘Energy and climate’ category, the figure for total spending by US foundations on climate change amounts rises to 1.82 per cent.

Data gathered by the US-based Environmental Grantmakers Association (EGA) shows a big emphasis on advocacy and policy among climate grantmakers.² In 2013, 55 per cent of funding for ‘Energy and climate’ used ‘Advocacy/Organizing/Movement building’ or ‘Public policy’ as the strategy, compared to 33 per cent across all issue groups.

In the UK

According to the Environmental Funders Network (EFN), UK trusts and foundations direct between 0.93 per cent and 2.2 per cent of their giving to address climate change.³

Climate philanthropy as a proportion of environmental spending



Foundation spending on climate change accounts for around a quarter of overall environmental grantmaking. A European Foundation Centre survey of 2,913 grants made in 2014 by 75 European foundations (including some UK foundations) found that 19.8 per cent of environmental spending went to ‘Energy and climate’.⁴

In the US climate change accounts for just 12.4 per cent of all environmental spending – though this figure rises to over 28 per cent using the broader ‘Energy

and climate’ criteria. A similar figure is found in the UK, with climate-related grants amounting to 25 per cent of environmental giving.

In the US, giving to the environment is estimated at 6.43 per cent of total foundation giving. The corresponding figure for the UK is between 3 per cent and 6 per cent.

Totals for climate-related spending⁵

US foundations (FC 1000):	\$195,180,214
UK foundations:	£26,897,552
European foundations surveyed:	€94,797,000

1 These figures are based on all grants of \$10,000 or more awarded by the FC 1000 – a sample of 1,000 of the largest US foundations – in 2013.

2 See <http://tinyurl.com/EGAxecsum>

3 Based on the latest figures from EFN (2011–12).

4 Figures are from 2014. To see the whole study, visit www.efc.be/EEFGmapping2016

5 Figures are for 2013, 2011–12 and 2014, respectively.

SEE ALSO

See interview with Rockefeller Brothers Fund president Stephen Heintz published in Alliance Extra on 3 May. www.alliancemagazine.org/interview/interview-stephen-heintz

KEY FACTS ABOUT THE PARIS AGREEMENT

- ▶ 195 nations approved an agreement to tackle climate change on 12 December 2015 following the largest gathering of heads of state in history.
- ▶ Governments agreed to ‘pursue efforts’ to limit global warming to 1.5°C above pre-industrial levels – which scientists say is the minimum threshold of safety for the planet – and to achieve net zero greenhouse gas emissions by the second half of this century.
- ▶ 188 national climate action plans – ‘Intended Nationally Defined Contributions’ or INDCs – were submitted. These action plans will be reviewed, and improved, every five years.

But...

- ▶ Neither the framework agreement nor the INDCs are legally binding.
- ▶ If you add up all the INDCs, they get us to either 2.4°C or 2.6°C – not to 1.5°C or even 2°C.
- ▶ There is a gap with regard to climate justice.

For the full text of the Paris Agreement, see <http://tinyurl.com/zo3nbrr>

Climate philanthropy: the time is now

Michael Northrop

The December 2015 Paris Agreement, and the thousands of commitments it catalysed, is the first truly meaningful global response to the climate crisis. Together, the commitments made at Paris by national governments, states, cities, businesses, banks, investors, land managers, builders and civil society groups have generated enormous hope and promise. The Paris Agreement is not legally binding, however, and it has no enforcement provisions. Those who made commitments must follow through voluntarily, and additional measures must also be taken beyond what was committed to in Paris if the world is to cap warming at 1.5°C.



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In Paris, 188 nations formally submitted plans to reduce their greenhouse gas emissions. In the aggregate, those plans will reduce global emissions by about half of what scientists say is necessary. Governments also successfully negotiated the framework for a credible international monitoring, review and verification system to track emissions and monitor progress; they collectively promised to mobilize at least \$100 billion annually to help developing economies make the transition to a low-carbon future; and they agreed that global temperatures should rise by no more than 1.5°C.

While these national and multilateral steps were the cornerstone of the Paris Agreement, the cascade of commitments at the sub-national level were just as important: the agreements by 123 states and regions to reduce emissions by 80 per cent or emit no more than 2 tons of CO₂ per capita; or by 436 mayors to join

a Global Compact of Cities to support worldwide municipal action on climate; or by 90 of those mayors to reduce emissions by at least 80 per cent by 2050; or by 500 endowments, cities, faith institutions, pension funds and universities with combined assets under management of \$3.4 trillion to divest from coal and in many cases other fossil fuels too; or by 53 global companies including Apple, Google, IKEA, Unilever and Walmart to shift to 100 per cent renewable energy; or by the World Green Building Council to only build and renovate buildings to a zero net energy standard by 2050 (see p34); or by 8,200 hospitals and 13 million doctors to commit to reduce their carbon footprints, divest from fossil fuels and prioritize the health impacts of climate on their communities; and by land managers in Africa and Latin America to restore 140 million hectares of degraded forest land (see p35), which will allow these lands to become carbon sinks.

A third basket of sectoral and cross-cutting priorities also emerged from the build-up and follow-up to Paris. These included a push to regulate use of hydrofluorocarbons (HFCs), a refrigerant gas that is 1,000 times more powerful than CO₂ as a greenhouse gas; growing support for international agreements to reduce aviation and marine emissions; increasing pressure on all finance, banking and multilateral development organizations to cease financing coal-fired electricity and mining, and to turn their sights to clean energy investments exclusively; a determination to further increase the amount of funds divested from fossil fuel investments; a commitment by the African Union and the African Development Bank to deliver at least 300 gigawatts of renewable energy to

the continent by 2030; and a growing movement among civil society groups to urge the cessation of all fossil fuel development. Civil society groups like 350.org (see p50) and Avaaz are adamant that the so-called 'carbon bombs' – the dozen largest fossil fuel deposits – must not be exploited, and they are gearing up globally to prevent their development.

It bears repeating that most of these commitments are strictly voluntary. Public pressure, norms of acceptable behaviour and a growing realization that our planet is at risk need to be the drivers of success. No one will be immune from



pressure or responsibility as we navigate the path forward. And we can already see a strengthening civil society voice calling for adherence to both the specifics and the spirit of Paris.

What has driven and will continue to power the voice of civil society groups, and has been behind the capacity building to date that has allowed so much positive movement worldwide, is the generosity of a very diverse philanthropic sector. After the failure of Copenhagen six years ago, many climate donors decided to leave the field or they dialled back their expectations and support for climate change work. Remarkably, donors then rallied impressively between 2013 and 2015 in support of nearly every facet of the global push for a success in Paris.

Groups of donors, for example, came together to support work by subnational governments, business, and faith groups, and on topics as diverse as land use, coal, clean energy, buildings, electric vehicles, HFCs and divestment, among others. It appears now that many of the same groups of donors are trying to rally themselves once again for the next push on climate.

That's good news. The goal line for achieving success seems to move nearer and nearer. Scientists are now saying we will need global emissions to peak by 2020 if we are to have a serious chance of limiting warming to 1.5°C. In addition, the scale of the work required has grown dramatically. We are well past funding model programmes and pilot projects. Now donors must also find ways to support mega-commitments made in Paris like the ones to new renewable power in Africa, reforestation in Africa and Latin America, and to keeping the 12 largest carbon bombs in the ground.

The work to ensure delivery of the Paris commitments is unprecedented in scale, as are the funds required by donors to operate at a scale commensurate with the challenges. Donors will need to be creative and nimble like never before. They will need to collaborate more. And ultimately donors, like the NGOs they typically support, will have to change gear to handle the enormous needs coming at them. The time for a step change in climate philanthropy is now. @

EXAMPLES OF DONOR COLLABORATION

European Climate Foundation

The European Climate Foundation (ECF) – a ‘foundation of foundations’ – was established in early 2008 as a major philanthropic initiative to promote climate and energy policies that would greatly reduce Europe’s greenhouse gas emissions and to help Europe play a stronger international leadership role in mitigating climate change. It has eight core funders, with project funding coming from a variety of others.

Breakthrough Energy Coalition

Bill Gates announced the creation of the Breakthrough Energy Coalition at COP21. It is a global group of 28 high net wealth investors from 10 countries committed to funding clean energy companies emerging from the initiatives of Mission Innovation, a global initiative to accelerate public and private clean energy innovation also announced by Gates in Paris. Coalition members include Richard Branson, Jack Ma, George Soros and Mark Zuckerberg.

RENEWABLE ENERGY FOR THE 21ST CENTURY

It is startling to learn how fast electricity systems are transforming themselves to renewables. The Renewable Energy Policy Network for the 21st Century, known as REN21, reports that 28.9 per cent of the world’s power-generating capacity is now renewable, and that 60 per cent of all new energy investment in 2015 was in renewable energy not traditional fossil fuel power.

Looking back over ten years from its founding, REN21 notes that installed solar for electricity has grown from a total of 2.6 gigawatts (GW) in 2004 to 277 GW in 2015. Solar for hot water has jumped from 86 GW to 435 GW, and installed wind has increased from 48 GW to 433 GW during the same period. These numbers far exceed any predictions made ten years ago and give hope that the much-needed future transformation will also exceed expectations.

China’s growth path on renewables is one reason to be optimistic. China now promises it will have deployed 200 GW of solar PV and 250 GW of wind by 2020. US deployment of solar and wind has also been growing nicely, with best ever years for both solar and wind in 2015.

Global renewable energy investment is another reason for hope. REN21 reports that dollars invested in renewables was \$285.9 billion, up from \$45 billion in 2004.

In one of the most telling signs of change, national policies designed to boost renewable energy use are now in place in 173 countries, up from just 48 in 2004.

See the 2016 report in full www.ren21.net/gsr

Interview

Florence Tercier and Anne Henshaw

A new focus for climate philanthropy

Within the field of climate change, the issue of climate justice has been neglected. The Oak Foundation, however, believes that issues of climate justice are central to the whole climate change question and is poised to launch a new climate justice initiative. Florence Tercier and Anne Henshaw of the Oak Foundation talk to Charles Keidan about the thinking behind the new fund, and their hopes for more resources to be focused on climate justice and more attention given to local communities at the sharp end of climate change.



‘Oak programmes stress movement building . . . we’ll be applying this approach to the climate justice initiative.’

‘We want to work with other foundations to build the field.’

Florence Tercier (left) heads the Issues Affecting Women programme of Oak Foundation.

Anne Henshaw is programme officer – marine conservation, Arctic and North Pacific.

How big is Oak Foundation in terms of the level of spending and endowment?

Florence: It doesn’t have an endowment but the grantmaking budget is slightly over \$200 million per year shared between all programmes. The resources of Oak Foundation originated from an interest in the Duty Free Shoppers business that Alan Parker helped to build. The foundation is family-led and professionally staffed. The board consists of six trustees drawn from the three generations of the family. We work internationally in very diverse programme areas addressing a range of social and environmental issues. There are seven programmes and the new climate justice initiative combines the forces of several of them.

Can you tell me about the evolution of the climate justice initiative?

Anne: In 2014, Oak made a large multi-year grant to the ClimateWorks Foundation to focus on climate mitigation. The trustees also wanted to ensure that the human dimension and the social justice issues the foundation cares about weren’t lost in the work. So Kathleen Cravero, president of the Oak Foundation, created a cross-programme steering committee made up of the directors of our programmes in international human rights, housing and homelessness, child abuse, issues affecting women, and the environment programme. We have spent the last two years developing a vision for how we define climate justice and a related grantmaking strategy drawing from a range of experts in the field. Based on that process, we built the strategy around two key pillars of work.

Essentially, we see adaptation and mitigation as intertwined, so we wanted to make investments that recognized that connection. We saw the Paris Agreement as a real opportunity to advance the agenda, so one of our pillars was to amplify the voices of some of Oak’s core constituencies including youth, women and indigenous people. We recognized that they are not only affected by climate change, but also the ones that can come up with solutions that will meet the needs of their communities. So we made an initial round of grants in 2015 to that end. That’s the first pillar.

We then spent the second year developing a strategic framework that would direct grantmaking to communities on the ground to help them build their resilience to climate change in the Arctic, East Africa and the Bay of Bengal. The strategy has four main strands – food security and food sovereignty, water access, migration and relocation, and sustainable livelihoods. Again, the focus is on helping youth, women and indigenous people build a movement that will amplify their voices and help to develop their resilience to climate change.

How did you decide to focus on Bengal, East Africa and the Arctic?

Anne: The trustees didn’t want to expand beyond the existing footprint of our current grantmaking

and we wanted to choose areas where the impacts of climate change were really clear.

And how will this work?

Florence: The first two years were really to build the strategy and to do the first round of grantmaking to support groups to make their presence felt in Paris.

Now that the strategy has been approved by the trustees, Anne is in the process of creating a resilience fund that is outside Oak.

Oak has numerous partners in its climate change work. Do you see this new entity as independent but working alongside your existing partners, or could it find itself within one of those partners?

Florence: The new fund will be working with Oak and existing partners but the ambition is also to find new partners to pool funds and to have more impact, particularly funders that have strategies that align with Oak Foundation's strategy.

Anne: A lot of climate funding is purely focused on mitigation and I think Oak sees a real opportunity to build the social justice element of climate philanthropy. We want to work with other foundations to build the field overall, and hopefully leverage some of these new funds around adaptation. I'd also like to add that the way we've structured the strategy recognizes the intersection between different fields. We think that this is where philanthropy is going, and we need to work across sectors. The elements of justice – whether you're talking about women's rights, human rights or indigenous rights – are all connected, and we think that through the lens of climate justice, we can bring some of these things together to really advance the rights of people across the board.

Florence: In addition to building on our thematic and geographic experience, we also want to build on our approach to philanthropy. Oak programmes stress movement building and how you actually go from the grassroots and build the capacities, connect groups and equip them with leadership capacities, and we'll be applying this approach to the climate justice initiative. So we will be looking at how groups have been working to advance and claim their rights and how that experience can be combined with the adaptation models that they are trying to implement. We plan to launch the initiative later in 2016.

'We can help the communities come forward and demonstrate to the policy community that this is a solution that they have helped build. We see this as a specific role for philanthropy because of its flexibility.'

I see it's a three to five year programme. How much of Oak's funding will be allocated to it?

Florence: The level of funding and investments for this particular initiative is USD \$25 million over five years.

And that will be alongside the existing environment work on conservation?

Anne: Yes. The environment programme as a whole is about \$38 million a year. The work in the Arctic is very aligned with climate justice strategy already, so that will be largely on top of the \$25 million investment. There are certain elements like migration and relocation that don't fall within the current climate resilience strategy in the Arctic, but, hopefully, these will be covered through climate justice. And as we mentioned earlier, the initial investment is really intended to grow the pot. Whenever Oak works in an area, it likes to work with partners and collaborate, and we see a real opportunity to leverage that money considerably over the five-year period.

Do you have any targets for that leverage?

Anne: We think that, for example, there are opportunities to work alongside some of the accredited organizations that are putting in proposals to the Green Climate Fund, but what we want to do is make sure that those kinds of funds actually reach the communities most affected. As the Green Climate Fund develops, it'll be important to build transparency and accountability in how those funds are being used, and we think there's an opportunity to work with regional partners in some of these geographies to ensure that happens.

I understand that only about 2 per cent of foundation grants and spending goes to addressing climate change. Does that suggest that your philanthropic peers are not giving enough attention to the issue?

Florence: In the process of defining our strategy, one of the things we did was to map the funding that goes towards global adaptation and resilience because funders come at this from different angles. What was clear was that a whole set of funders are not calling what they do climate justice or adaptation.

But that's the area they may actually be working in?

Florence: Exactly. If we can pilot grassroots initiatives to develop local solutions and to give the ownership of developing those solutions to the local communities, we can help the communities come forward and demonstrate to the policy community that this is a solution that they have helped build. We see this as a specific role for philanthropy because of its flexibility.

This will then undam the larger stream of funding from bilaterals and multilaterals, particularly on the issue of adaptation and resilience, and this is one of the ultimate aims of the initiative.

The focus of this issue of *Alliance* is the Paris Agreement. What do you think was gained and what was missed at Paris?

Anne: First, we recognize that this is a landmark agreement. The fact that 195 nations came together to sign something that stems greenhouse gas emissions and tries to keep temperature rises below 2°C is enormous. On the other hand, several of our partners felt like the agreement didn't go far enough with respect to human rights. Because human rights language is not included in the operative text, it will really be hard to hold states accountable for the impact that is being felt by local communities. That being said, both Florence and I were struck that the discourse around climate justice was everywhere and I think it made a difference in the terms of the final agreement. Looking forward, we're going to have to think about how we can build on some of the language that was included. We want to work with some of our partners that were in Paris – the Women's Environmental and Development Organization (WEDO); Tebtebba, a global indigenous organization to help build the voice of indigenous people; the Global Greengrants Fund; and 350.org, who helped in building up the voice of youth in Paris, along with the Earth Journalism Network which brought journalists from over 40 countries, largely from the developing world, to the meeting – to see how we can strengthen what is in the agreement.

Florence: The issue of gender was much more prominent in Paris, thanks to the work of some of our grantees and a lot of women's organizations that have been really pushing for that. I think the real challenge is the implementation. If women continue to be marginalized, it's going to make it difficult for them to be part of the process. So building social justice, advancing rights at the same time as we are looking at adaptation and resilience models, is crucial.

'Several of our partners felt like the agreement didn't go far enough with respect to human rights.'

The work in the Arctic is very aligned with climate justice strategy.



Oak Foundation's thinking on the climate justice initiative preceded the Paris Agreement. To what extent will the agreement inform your thinking about what to do next?

Anne: Paris was definitely an important moment for us because it really catalysed the steering committee to recommend a series of grants in 2015, before we had a full-blown strategy worked out. But we recognized that there's a lot of work that needs to be done post Paris, and the nice thing about working at Oak is that it recognizes the value of multi-year grants and supporting organizations over a longer time frame.

Florence: At the beginning of the discussions on the initiative, we had a meeting with people from the climate change movement and it was really contentious. We had people telling us that climate justice is a very controversial issue and it applies to different things. Now, after Paris, I think people see that it's actually one of the central issues, and that the whole notion of justice needs to be integrated in the implementation of any agreement.

What about the leadership role of Oak in all this? Are there plans to show visible strong public leadership to persuade philanthropic peers to become more involved?

Anne: Oak operates largely on the model that we 'lead from behind'. We really work through our partners and we value the work they do. It's not about us, it's about who we serve.

Florence: It's also about supporting the partners that are taking the risks. People involved in those groups are taking real risks and those risks are increasing all the time. @

A new agenda for city philanthropy

Johanna Partin

Everybody knows about the Paris Agreement, but what many don't know is that cities played a crucial role in making it happen. Around 450 mayors from five continents gathered at the Climate Summit for Local Leaders at Paris City Hall on 4 December to pledge ambitious climate change measures. UN secretary general Ban Ki-moon, UN Framework Convention on Climate Change (UNFCCC) executive secretary Christiana Figueres and many other key figures recognized the central role of cities in reducing aggressive greenhouse gas (GHG) emissions and encouraging bolder national and international action. And in April 2016, the Intergovernmental Panel on Climate Change (IPCC) voted to include a major new focus on cities in all of its research in the coming decade.



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Cities are essential to combatting climate change. They are home to more than half of humanity, and are responsible for three-quarters of humanity's GHG emissions worldwide. They are also on the frontlines of climate change: floods, droughts and extreme weather events are felt and dealt with locally. Local decision-makers are much more able to enact change quickly and efficiently. As Pope Francis said in his May 2015 encyclical on ecology and climate change: 'Climate change calls on societies to act quickly and cities tend to be more nimble than national governments.'

Averting the worst impacts of climate change will require us to cut GHG emissions by at least 80 per cent by 2050. Most of this will need to happen in cities. There's general agreement that mid-term goals of 20–30 per cent reductions can be achieved in cities through incremental improvements in municipal building, energy, transportation, land use, water and waste systems. However, achieving the 80 per

cent GHG reduction we need to see by 2050 will require a fundamental redesign of core urban systems, requiring us to reimagine and reinvent our cities entirely.

It will mean completely re-envisioning and redoing our urban buildings, energy supply, transportation and waste systems and it will involve the

entire 'city ecosystem': local government, the private sector, citizens, technology providers, private



COMPACT OF MAYORS

Around 450 mayors from five continents gathered at the Climate Summit for Local Leaders at Paris City Hall.

investors and the philanthropic community. And it's going to require very thoughtful approaches to make sure everyone – including at-risk communities, which are often left out of the conversation, or at least not engaged meaningfully – benefit from the transition to a zero-carbon future.

The good news is that cities are getting serious about doing something about it. The cities that make up the Carbon Neutral Cities Alliance, for example, have committed to working to cut GHGs by 80 per cent or more by 2050 or sooner. Many of them are already demonstrating significant reductions. In Sydney, Australia, between 2006 and 2012, GHG emissions decreased by 12 per cent while population increased by 16 per cent and gross domestic product (GDP) grew by 23 per cent. In Portland, Oregon, GHG emissions have fallen by 14 per cent since 1990, while population has increased by 31 per cent and jobs by 20 per cent. Copenhagen, Denmark has decreased GHG emissions by 31 per cent since 2005, while its population has increased

At present only about 100 cities globally – out of about 50,000 – have committed to and are actively pursuing carbon neutrality.

by 15 per cent and the local economy has grown by 18 per cent.

Many of the most innovative approaches to urban decarbonization have been enabled by philanthropic grants and investments. Innovative programmes for financing clean energy retrofits in residential and commercial buildings, such as Property-Assessed Clean Energy (PACE) programmes, were tested and brought to commercial viability through grants from foundations. Foundations have often underwritten the risks associated with testing the development and implementation of groundbreaking local policies for getting to zero waste, zero net-emission buildings and decarbonized transportation systems. And much of the work currently being undertaken in local communities around the world to facilitate a just transition to clean and renewable energy systems is being made possible through philanthropic support.

Philanthropy is also enabling virtually all of the key networks that exist to support cities in their transition to low-carbon futures, such as the Carbon Neutral Cities Alliance, the Urban Sustainability Directors Network, the Compact of Mayors, United Cities and Local Governments, C40 Cities Climate Leadership Group, ICLEI Local Governments for Sustainability and others, without which there'd be a lot more reinventing of the wheel in cities' GHG reduction efforts.

But cities and philanthropy are going to have to step up their efforts in a significant way to enable the kind of change we need to see to stay below 2°C – and certainly 1.5°C – globally. While 195 countries have signed on to the landmark Paris Agreement, there is a significant gap between the GHG mitigation pledges that these countries have made and the actual reductions needed to stay below that target.

That is why deep GHG reductions at the local level are so critical. At present only about 100 cities globally – out of about 50,000 – have committed to and are actively pursuing carbon neutrality. This number will need to increase to the thousands to make significant global progress, and they'll need a lot of help doing it.

The philanthropic community needs to help decarbonize our cities in a way that benefits at-risk communities.

The science tells us we only have 34 years to *completely decarbonize* – this means that every investment decision we make from now onward will directly either enable this or prevent it. Period. We can't kick the can down the road any longer.

To catalyse this change, the philanthropic community has a responsibility to be hard-nosed in its support for deep and sustained efforts towards decarbonization. The urgency of getting to carbon neutrality by 2050 no longer permits the luxury of investing in incremental efforts that don't pave the road to carbon neutrality. Don't get me wrong: progress is made by setting ambitious goals and then taking the incremental steps needed to get there. However, our goals need to be bolder and our incremental advances need to be bigger and happen more rapidly. The science tells us we only have 34 years to *completely decarbonize* – this means that every investment decision we make from now onward will directly either enable this or prevent it. Period. We can't kick the can down the road any longer.

The philanthropic community also needs to help decarbonize our cities in a way that benefits every member of society, including at-risk communities. This is absolutely critical, and it can be done, but it requires special focus and attention to make it happen. Time and time again, it's been shown that transformation that is designed inclusively, intentionally and smartly will lead to a better system design. A growing number of philanthropic leaders recognize this as a core value, and are applying this thinking to everything in which they invest. Deep GHG reductions work should be no different.

For example, the Kresge Foundation, which seeks to 'address society's most intractable problems', has made strategic investments in global urban decarbonization initiatives. It sees these not only as climate solutions, but as catalysts for new models of economic prosperity, social equity and enhanced quality of life – models that place people and communities first in a new era of climate balance and resilience.

The next few years will be absolutely critical in determining whether we as a global community shift towards the necessary carbon-neutral future, or fall into the outdated inertia of unambitious efforts that lock us into a passive future.

The challenge before us is significant. But in my 25 years of climate and clean energy work, I've never felt more sure, nor been more optimistic, about the groundbreaking work happening in cities, much of which has been enabled by philanthropy. There is an unprecedented opportunity and international momentum created by the Paris Agreement. Let's embrace it and make it happen. @

Rebuilding the present

Edward Mazria

Writer William Gibson is quoted as saying, 'The future is already here, it's just not evenly distributed.' When asked about the quote, he replied: 'I'm not trying to predict the future. I'm trying to let us see the present.' So it is today with climate change. The world must reach zero fossil fuel CO₂ emissions by 2050. We already have the tools and technology to see the present and solve the problem of greenhouse gas (GHG) emissions, but they aren't evenly distributed. When it comes to the built environment, philanthropy can help with that distribution.



JAMEY STILLINGS

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Since cities are responsible for over 70 per cent of global energy consumption and CO₂ emissions, mostly from buildings, this will only be possible by dramatically reducing citywide building sector energy demand and emissions. The opportunity to do that is here: over the next two decades, a staggering 82 billion square meters (883 billion square feet), an area roughly equal to 60 per cent of the total building stock of the world, is projected to be built, and rebuilt, in cities worldwide.

The majority of worldwide urban development over the next two decades is projected to take place in China (38 per cent), North America (15 per cent) and India (9 per cent), followed by Southeast Asia, Latin America and Africa. A number of cities have committed to cut their GHG emissions by 80 to 100 per cent by mid-century. A group of these cities mostly from North America – Vancouver, Seattle, New York City, Boston, Washington DC, San Francisco, Boulder, Cambridge MA, Palo Alto, Austin, Burlington VT, and Phoenix – along with London and two states (New York State and California), recently came together to map out how these targets could be met. Steps include:

- ▶ Design and build all new buildings and major renovations to zero net emissions building (ZNE_m) operation standards.
- ▶ Adopt and enforce advanced building energy codes in 2016, and incrementally strengthen them every five years to reach a ZNE_m energy code by 2030.
- ▶ Train local code officials and design professionals in ZNE_m building design strategies and construction.

And by 2050, cities must renovate their entire existing building stock to high-performance standards by mandating energy efficiency upgrades, meeting

advanced energy codes at critical building intervention points (for example, zoning or building use changes and point-of-sale), and providing appropriate incentives to do so.

Their success will depend on the ability to scale ZNE_m to urban areas worldwide. This will include effectively distributing current sustainable planning and building design strategies and tools, advanced code development and information, and renewable energy technologies – especially in areas mentioned above where the largest amount of construction will take place over the next few decades.

Philanthropists can help achieve ZERO by focusing on the development of advanced and ZNE_m building energy standards and codes. They can enable targeted emissions reductions campaigns and support programmes for the built environment in these countries and leading-edge cities.

For example, the development of advanced and ZNE_m building energy standards and voluntary codes in the US by a coalition of organizations – Architecture 2030, New Buildings Institute and the American Council for an Energy Efficient Economy – is under way with federal assistance and with the guidance and financial support of foundations such as the Rockefeller Brothers Fund and the Energy Foundation.

Assistance will now be needed to develop a similar global framework and specific programmes to implement it through organizations and initiatives such as the Carbon Neutral Cities Alliance, Urban Sustainability Directors Network, China Accord Initiative, AIA+2030 education series expansion (Asia and Latin America), 2030 Districts Network, Zero Cities Program, and municipal, state and provincial governments pledging building sector zero or near zero emissions reduction targets by 2050.

The infrastructure developed around ZNE_m campaigns will provide other benefits as well, such as urban planning and building design for climate resilience. Providing the appropriate financial assistance to develop implementation strategies, training, tools and monitoring will be critical to success. It is the perfect present investment for the future of our planet. @

How philanthropy can help restore our forests

Wanjira Mathai and Sean DeWitt

Forest landscape restoration (FLR), which focuses on the benefits that trees can provide in landscapes, is one of the most attractive elements of the Paris Agreement. It has the potential to deliver improved food, water and energy security, increased livelihoods and green jobs, increased habitat and biodiversity – while also providing significant climate change mitigation and adaptation.



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The philanthropic community can play an instrumental role in turning the ambitions set forth by the Paris Agreement into tangible results. Here, philanthropy should harness the momentum generated in Paris to fulfil the Bonn Challenge, a global effort to restore 150 million hectares of land by 2020 and reduce emissions by up to 15 per cent. Almost 100 million hectares has so far been committed in more than 30 countries. Many countries have included these commitments in their Intended Nationally Determined Contributions (INDCs) that underpin the Paris Agreement. The question is how to transform these commitments into even further and faster progress. To do so, funding is needed in the form of grants, loans, equity and risk mitigation mechanisms. Increased support from philanthropy should be focused on the following areas.

Investment in the enabling conditions

The potential for forest landscape restoration to reach scale in a given geography is shaped by policies, incentives, institutional capacities, social and market conditions and other factors. Before financial, social or human capital is invested, it is essential to understand which of these conditions are in place and then to design measures to address the gaps. This can be done by applying a restoration diagnostic to measure these conditions. The history of large-scale restoration successes, including in South Korea, Niger and Costa Rica, shows that they were all triggered by changes in the underlying enabling conditions not by one or more discrete projects. Several foundations are already engaged in this work. For example, the Climate and Land Use Alliance funded an assessment entitled *Securing Rights, Combating Climate Change* to determine the

importance of land rights in supporting community forests. The report demonstrated that strengthening community forest rights is an effective way to meet climate goals, safeguard forests and protect livelihoods. It showed that rates of deforestation were up to 20 times lower in community forests with strong legal recognition and that one eighth of the world's forests are community forests, which store 37.7 billion tons of carbon.

Investment in implementation

Many FLR business models take longer than the commercial investment window of three years. Thus, patient, risk-tolerant, capital from program-related investments or impact investments is needed. In addition, the pipeline for bankable projects needs to be strengthened. Philanthropic funds can be used to stimulate this pipeline, to incubate early-stage operations and to build the capacity of entrepreneurs to absorb capital at scale.

Investment in the global movement

As the number of countries, NGOs, community groups, companies and individual landowners who commit to restore degraded land continues to grow, there is a need for this emerging industry to mature. Intermediaries are needed to provide knowledge and innovation platforms and to harness the power of technology to deliver new tools and opportunities. Philanthropy can play a key role in supporting global entities like the Global Partnership on Forest Landscape Restoration (GPFLR) and the Global Restoration Council to continue to increase their capacity, membership and suite of tools that can help everyone in this growing field to do their jobs better.

The commitment to create a sustainable future has never been stronger and the restoration of forests is central to that commitment. It's now time for philanthropy to help accelerate the pace and scale of progress. @

Ethiopia: community meeting to talk about deforestation.



The clean transport revolution

Anthony Eggert

Functioning transportation systems are fundamental to modern, prosperous societies. They provide a means to get to work, connect us to friends and family, and catalyse economic activity. But transportation today comes with a cost. It produces approximately 18 per cent of human-related greenhouse gas (GHG) emissions and local air pollution that contributes to health problems for millions.



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To ensure a safer, more prosperous future, transport emissions need to be reduced significantly by mid-century. Reaching this goal requires a comprehensive set of strategies. These include equipping cities with increased transit, biking and walking options and more efficient cars, trucks, planes and ships that use increasingly lower-carbon sources of energy.

Fortunately, an electric-drive vehicle (EDV) revolution is under way that has the potential to end over 100 years of dominance by oil-powered vehicles. Governments including California, China, India, the Netherlands and Norway are leading full-scale shifts to EDVs including plug-in hybrid, battery and fuel-cell vehicles. Consumer demand is on the rise, and manufacturers like GM, Nissan, Tesla and others are starting to bring affordable EDVs to market.

These developments are welcome and necessary. According to the International Energy Agency, EDVs should account for at least 75 per cent of car sales by 2050. Such a transition will also produce economic

benefits by contributing trillions of dollars in fuel savings for consumers.

Increasing the adoption of EDVs consistent with international climate goals, however, requires overcoming four early-market challenges: cost, convenience, consumer awareness and lasting commitment by governments and industry. Fortunately, solutions to

these early challenges exist in the form of improved incentives, infrastructure and information.

- **Incentives** Well-designed regulatory instruments like fuel economy, GHG and zero-emission policies for car makers and fuel providers; and other incentives like low-emission zones for cities and parking privileges.

- **Infrastructure** Support for planning and implementation of public fuelling stations and building codes that are EDV-friendly. Support for integration of vehicles with renewable energy including public-private partnerships and planning across governments, industry and utilities.
- **Information** Credible information for consumers, businesses and policymakers about the benefits of EDVs and the most effective ways to shift the market.

Philanthropy and philanthropic institutions are uniquely positioned to help with the shift to EDVs. As a global organization, the ClimateWorks Foundation works with foundation partners and grantees in key markets. We develop and implement strategies, evaluate investment opportunities, support diverse coalitions, share policy lessons across regions, and help to mobilize and inform citizens and key stakeholders. The global nature of automobile and supplier markets makes a global strategy particularly powerful.

There are several recent examples of philanthropically supported activities on EDVs. The International Zero-Emission Vehicle (ZEV) Alliance is a collaboration of 14 members comprising countries, states and provinces sharing the goal of 100 per cent zero emissions on passenger vehicle sales by 2050. The China-US Zero-Emission Vehicle Policy Lab is another example established to conduct joint policy research, share best practice and explore policy collaboration and implementation across two of the largest EDV markets. The Platform for Electro-Mobility unites businesses and stakeholders from the road, rail and electricity supply sectors in Europe with civil society and cities to promote the benefits of sustainable electrification of transport. Finally, the Charge Ahead Coalition in California aims to put a million electric cars, trucks and buses on the road within 10 years.

Looking ahead, transitioning to a sustainable transportation system requires transforming one of the largest industrial sectors in the world. Philanthropy will need to be at the heart of these efforts to maximize the social benefits and likelihood of success. Together, we can make significant investments to support transportation that is clean, affordable, accessible, and consistent with the world's climate goals. We look forward to collaborating with other foundations and partners to accelerate this work and the world's response to the climate crisis. @

For more information www.climateworks.org



EIGHT - MOBILITY

EDVs should account for at least 75 per cent of car sales by 2050.

Climate justice: the spectre at the Paris feast

Nnimmo Bassey and Terry Odendahl

Michael Donoghue writes in this issue (p43) that Pacific Islanders are responsible for only a tiny fraction of GHG emissions, yet they are suffering the worst effects of global warming. This unjust situation should be at the heart of the climate debate but was overshadowed in Paris by the much-acclaimed progress made elsewhere. We would question how much progress can truly be made without a commitment to climate justice. Climate justice demands action from those who are contributing most to climate change and benefiting from resource depletion: developed countries and multinational corporations. This is the area that is crying out for philanthropic action predicated not on charity but directed towards systemic change.



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The mindset required for action can be summed up in three words: conviction, compassion and commitment. By *conviction* we mean full agreement that global warming is happening and that it is primarily the result of human activity. By *compassion* we mean empathy with and care for the victims, to date mostly in the Global South. That conviction and compassion combine to require *commitment* to do something about the situation; to put our resources where our hearts are and curtail the toll being taken on the planet.

Is the Paris Agreement a turning point?

The Paris Agreement has been hailed as a turning point in global efforts to avoid catastrophic climate change. Nearly all countries, polluters and non-polluters, rich and poor, have for the first time agreed to do something about global warming. So at least there is conviction, but the value of conviction without action is limited. Will mere acknowledgement that climate change is urgent and that temperature increases above pre-industrial levels must be kept to 1.5°C, or well below 2°C, be enough to save life as we know it on the planet?

Key concepts of justice missing

The key concepts of justice, including common but differentiated responsibility, have barely survived on life support provided by the preamble to the Paris Agreement. This is an opportunity for philanthropy to back the countless groups such as Corporate Europe Observatory, Friends of the Earth International and

Third World Network advocating that northern nations increase their level of ambition in line with the requirements of common but differentiated responsibility. Apart from the lack of attention to climate justice, there are two big omissions from the agreement. First, as La Via Campesina, the international peasants' movement, puts it (and as other articles in this issue have pointed out), 'there is nothing binding for states, national contributions lead us towards a global warming of over 3°C and multinationals are the main beneficiaries. It was essentially a media circus.'

No mention of fossil fuels

Second, the agreement made no mention of fossil fuels, the great culprit in the unfolding climate crisis. The influence of the fossil fuel lobby was made most apparent at the Warsaw COP in 2013 when there was an official coal conference during the negotiations. It is estimated that the only way to keep temperature rises to 1.5°C above pre-industrial levels is to stop burning fossil fuels by 2030. Philanthropy can and should fund the groups and coalitions organizing and advocating for alternatives, while at the same time divesting its own endowments from fossil fuels. Some have already set the example, as shown by Ellen Dorsey, Sian Ferguson and Clara Vondrich's article (p45) and a recent *Alliance* interview with Stephen Heintz of Rockefeller Brothers Fund. But as 350.org leaders May Boeve and Bill McKibben, also write (p50), '[Big] philanthropy is not sufficiently involved. Many foundations, including some of the largest environmental funders, have not divested from fossil fuels.'

Need for funding for adaptation as well as mitigation

Wanjira Mathai and Sean DeWitt point to another area in need of philanthropic attention: grassroots movements fighting to preserve local ecosystems embodied in forests (p35). While the Paris Agreement highlights carbon markets and the embedded carbon offsets, forest communities, especially those of indigenous peoples, see their trees and soils as arenas of life and culture and not as carbon sinks. Tackling global warming at the grassroots level means supporting groups fighting for their way of life and their culture. These fights provide opportunities for compassion which lead resolutely to commitment. Commitment demands action now, not simple intention. It requires philanthropy to fund adaptation on the scale that it has been funding the search for mitigation.

There are areas where justice has a still more obvious application. Nations have considered climate change to be a national security issue and their obstinate

dependence on dirty energy has led to a form of climate warfare against protesters. While nations continue to see their interests tied up in big dams and fossil-dependent power generation, these sites have become the focus of protests. In some cases, protesters have become the targets of violence.

Emissions reductions determined by national interests

The linchpin of COP21 was the so-called Intended Nationally Determined Contributions (INDCs). The INDC platform was set by COP19 in Warsaw. As the name implies, nations were required to submit the level of emissions reduction they would contribute towards limiting temperature increases above pre-industrial levels. The key attraction was that countries would set their own targets, in contrast to the Kyoto Protocol which required that countries reduce emissions in line with a global assessment of contributions, abilities and historical responsibility. In other words, under Kyoto, the emissions reduction plan was based on the reduction in emissions that was actually needed. Under the INDCs, national interests determine what actions should be taken. Analysts at the UN Environment Programme (UNEP) indicate that with the INDCs the world is set for a 3–4°C temperature increase at the minimum, which would mean irreversible loss of lives, species and habitats, territories and citizenship due to climate change.

Catastrophy pending

This sort of temperature increase would make Africa, for example, uninhabitable because the continent would suffer temperatures 50 per cent above global averages. Temperatures in the range of 4.5–6°C would mean incineration of the continent, heatwaves, floods, catastrophic droughts and crop failures, among other calamities. Island communities and coastal regions would disappear under water. Maxine Burkett notes in her article (p42), ‘in earth’s documented history, we have not seen the amount of carbon released combined with the speed at which we are depositing it



Tackling global warming at the grassroots level means supporting groups fighting for their way of life and their culture.

Thousands of climate justice groups around the world are offering solutions from those most affected, including indigenous peoples, women and youth.

in the atmosphere.’ As she suggests, climate-induced migration will need to be a funding priority of foundations. More starkly, Pablo Solon, former chief climate negotiator for Bolivia, remarked: ‘The Paris agreement will force us to choose [which] of our children will survive, because in a +3°C world, not all will be able to live.’

How philanthropy can support climate justice

We have considered at length the reasons why the current climate negotiation pattern is leading us into more crises. The good news, however, is that grassroots communities are both innovative and resilient in the face of challenges. Thousands of climate justice groups around the world, including coalitions such as Climate Justice Now and the Grassroots Global Justice Alliance, are offering solutions from those most affected, including indigenous peoples, women and youth. They are being supported by funding from foundations including Rockefeller Brothers Fund and the Chorus, Kendeda, Oak and Overbrook Foundations, some of whose efforts are profiled in this issue.

We urge philanthropy to become more committed: to divest from fossil fuels and reinvest in renewable energy; to fund adaptive strategies developed at local and regional levels; to support people’s movements putting pressure on world leaders; to make grants for the protests that will be erupting around the planet to shut down fossil fuel facilities; to fund alternatives such as wind and solar power; and, perhaps above all, to consider the issue of climate justice which should inform all our efforts to combat the various forms of climate change. @

Supporting today's young climate leaders

Chloe Maxmin

For the past four years, one word has dominated my world: divestment. In 2012, I co-founded Divest Harvard, calling on Harvard University to divest its \$36.4 billion endowment from fossil fuels. Divest Harvard grew from a group of three people into a movement of over 70,000 within two years. Meanwhile, hundreds of fossil fuel divestment campaigns launched across the world. I learned one enduring lesson with Divest Harvard: in the age of climate chaos true leadership comes from youth. Now I see that philanthropy can play an important role in supporting today's young leaders.



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In early 2015, we organized our first campus-wide referendum in which 72 per cent of students supported divestment. This was also the first vote on fossil fuel divestment worldwide. We organized rallies and protests. Six students blockaded the office building of Drew Faust, Harvard's president. This led to the first campus arrest since the Vietnam War protests and the first arrest of the divestment movement.

The Harvard administration refused to act. So on 12 February 2015, 34 students launched a sit-in inside the president's office building. We occupied the main hallway, hung banners, posted on social media, spoke with press, released statements and prepared for arrest or a long occupation. Drew Faust came to see us. She had publicly said a few months earlier that Harvard is defined by those who are 'willing to get into necessary trouble'¹ to right wrongs. So I expected her to say: 'I admire your courage and conviction but do not agree that Harvard should divest.' Instead, she was angry. She called us 'coercive' and 'disruptive'. There was no pride or sympathy in her eyes. When confronted with necessary trouble, Faust despised it. The hypocrisy was overwhelming.

Marshall Ganz, a social movement theorist and Harvard professor, defines leadership as 'accepting the responsibility to create conditions that enable others to achieve shared purpose in the face of uncertainty'.² The events of 12 February made it clear to me that Harvard does not understand responsibility in the age of climate crisis, otherwise it would have divested and supported student activists.

But on that day I saw leadership in my peers. We are the first generation to live the climate crisis. Despite



Divest Harvard encircles Harvard Yard during Harvard Heat Week in April 2015.

fear and uncertainty – many Divest Harvard students had never participated in direct action before – we accept that the responsibility to act falls on us. Our work on campus embraced all who wished to see Harvard fight for its students and the world.

Despite Harvard's intransigence, Divest Harvard organized Harvard Heat Week in April 2015. We shut down the president's office building for six days. Many alumni came back to campus (including Bill McKibben, Darren Aronofsky and Cornel West), and we trained hundreds of students, faculty, staff and community members. Although I have graduated, Divest Harvard continues to grow.

But young climate leaders need support. Philanthropy can provide that support in two ways. First, youth organizers need funding to run their own creative campaigns. We often volunteer our time, and campaigns often lack the resources to become as effective as they might. Second, campaigns like Divest Harvard across the country are breeding a new generation of changemakers with sophisticated organizing skills. But, as I learned when I graduated, there are limited jobs – especially jobs with a good income – for young alumni. How can we create more opportunities in this movement? I imagine a series of fellowships for young climate justice organizers providing support for recent alumni to work on climate campaigns for two years after graduation. In college, we were students and activists. Now we can be full-time activists, but we need the financial stability. Philanthropy can make this movement sustainable for the young people leading it.

Rolling Stone journalist Matt Taibbi wrote of youth's role in the 2016 US elections: 'Young people aren't dreaming. They're thinking. And we should listen to them.' Today's youth see through the complexity of the climate crisis to understand what justice looks like. Let's look through that lens together. @

¹ <http://tinyurl.com/DFremarks>

² <http://tinyurl.com/GanzLeadership>

Climate justice must include indigenous peoples

Rebecca Adamson

Despite the fact that 40 per cent of the 116 environmental activists murdered in 2014 were indigenous¹ and a significant portion of the oil, gas and mining production (39 per cent now and 46 per cent of future reserves) is on or near indigenous land² — the Paris Agreement removed all references to indigenous rights from the binding portion of the agreement. Indigenous rights were relegated to the preamble, where they serve as an aspiration rather than a commitment. Why are indigenous peoples systematically eliminated from the climate debate?



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One reason is because climate change is addressed almost exclusively through a western science-based lens and approach; yet volumes of scientific literature recognize the efficacy of traditional ecological knowledge and land stewardship practices in protecting the environment and biodiversity. Legally owning 11 per cent of forests and inhabiting 22–24 per cent of the earth's land surface,¹ indigenous livelihoods are typically low-carbon or carbon-neutral, and contribute the least to global warming. Simply put, it is not a coincidence that 80 per cent of the world's remaining biodiversity is to be found on indigenous lands. So why aren't the climate scientists collaborating with indigenous peoples (IPs) on a global framework for preventing, mitigating, and adapting to climate change that includes traditional ecological knowledge?

Support for IPs to work on climate change is virtually non-existent. Less than one tenth of a percent of the hundreds of millions of aid and philanthropic dollars going to prevent, mitigate and adapt to climate change goes directly to IPs. Of the funding going to indigenous organizations, the majority comes from government agencies within the European Union, which have official policies for working with IPs.

European support for IPs has been effective in three major ways: Europeans stress process over discrete one-off projects; support is long-term and continuous over decades; and rather than imposing their own priorities or agenda, most European support responds to the needs of indigenous communities. The US counterpart — the Agency for International Development — has no policy for IPs, and lacks the interest shown by the Europeans, leaving philanthropy as the greatest



Wives at a hearing for their husbands in October 2015. All three husbands were political prisoners related to

the hydroelectric dam, Hidro Santa Cruz in Santa Cruz Barillas, Huehuetenango, Guatemala.

source of support. Yet the efforts of US foundations tend to be uneven; funds are to implement the donor's agenda, and grants tend to be routed through other NGOs and intermediaries. Why isn't philanthropy doing more?

The philanthropic community attributes such a low level of funding to the lack of IP capacity, but often the philanthropic lens limits the donors' capacity to adapt their paradigms to the worldviews of IPs. Donor bureaucracy fails to adapt funding models in ways that allow IPs to define their own development destinies according to their own understandings of success. It is true that many indigenous organizations have difficulty with the application, budgetary and reporting forms of different donors. It is equally true that one of the most profound successes of the 21st century is the global adoption of the UN Declaration of the Rights of Indigenous Peoples, clearly evidence of a sophisticated range of IP capacity.

So why should foundations increase support to IPs? A 2008 World Bank study of 140 successful climate change strategies found that 100 per cent were implemented by local community organizations. Not a single successful solution was found within governments or the private sector. The report concluded that the typical big institutional approach to climate change was counterproductive to the kind of innovation, creativity and practice found in all the successful solutions for mitigating and adapting to climate change. What is needed from philanthropy is a 'bottom-up' financing system that provides flexible, agile and incremental funding, and links local organizations with partners at the national, regional and international levels. @

1 <http://tinyurl.com/IPmurders>

2 <http://tinyurl.com/IPrightsrisksreport>

3 <http://tinyurl.com/IPsandbiodiversity>

Care for the earth: traditional wisdom of ancestral authorities

Juanita Cabrera Lopez

Guatemala is among the 19 most diverse countries on the planet. Its particular vulnerability to hurricanes, tornados and drought makes it urgent and critical to respond appropriately to the threat of climate change. However, any response must be grounded in respect for human rights. It must be committed to the full, equal and effective participation of those most affected but contributing the least to climate change – indigenous peoples.



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Climate change is affecting our communities not only through the natural disasters that are its by-products, but through mega-development projects. As part of Guatemala's Intended Nationally Determined Contributions (INDCs), mitigation strategies are moving away from fossil fuels and towards renewable energy. However, as an example, the development of the hydroelectric dam, Hidro Santa Cruz in Huehuetenango, has become a source of contention. The proposed project would be installed in an area used by the Q'anjob'al people for ceremonial, recreational and agricultural purposes.¹ The community was not consulted about the project and did not consent to its construction. Community leaders, ancestral authorities and spiritual elders who question proposed development projects are met with threats, criminalization and persecution. Some have been killed.

In the department of Huehuetenango, one indigenous group, Asociación de Mujeres Eulalenses para el Desarrollo Integral Pixan Konob, has received philanthropic support for their work on reforestation, traditional seeds and native plant species, and natural resource management. They have also worked to integrate women's rights, political participation and leadership development. This backing of traditional knowledge as part of the climate change solution

is a positive step. However, what is missing is direct funding to traditional authorities and autonomous organizations. As these are often based on traditional structures, many have difficulties in receiving direct funding because they are not NGOs.

Philanthropists must work directly with our knowledge holders. They are the keepers of a vision of life and the world grounded in the interconnection between humanity and all the sacred elements. This has conserved our rivers, forests, traditional seeds and medicines. Indigenous youth are looking to learn these traditional teachings from elders not taught in western-based educational systems. Support for inter-generational knowledge exchange is one of the things most needed from philanthropy. This includes native language revitalization and spiritual formation which in turn will strengthen our social institutions.

Information sharing is critical in our communities yet internet access remains a luxury. Our youth are technology-savvy and need basic equipment from computers to generators so that they can stay informed and connected and can facilitate the participation of their elders in processes affecting their peoples. Part of the problem is that many in our communities are not aware of these processes because information does not reach them. Equally, philanthropists should consider funding indigenous media platforms such as community radio programmes, journalists and photographers.

The philanthropic community must also support efforts to give indigenous governments a more appropriate status within the UN system.² Climate change-related meetings at the UN or the World Bank need to ensure that traditional authorities from indigenous peoples are included.

We are pushing for a power shift that allows indigenous peoples to make decisions over processes affecting our lands, territories and natural resources. We are asking that our knowledge systems be valued and integrated into climate discourse, policy development and actions. Those knowledge systems, of which elders, spiritual leaders and ancestral authorities are the custodians, are key to relearning how to care for the earth. @

1 Cultural Survival, 'Guatemala: We Are All Barillas – Stop a Dam on Our Sacred River!' <http://tinyurl.com/StopDam>

2 Indian Law Resource Center, 'Oklahoma tribes learn about engaging in the UN system' <http://tinyurl.com/EngagingUN>

Graffiti in Pavencul, Chiapas, Mexico stating 'No to Mining, No to Hydroelectric'.



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Climate-induced migration and the role of philanthropy

Maxine Burkett

We are now in a 'no-analogue' state according to University of Hawai'i oceanography professor, Dr Richard Zeebe. In other words, in the documented history of our planet, we have not seen the amount of carbon released combined with the speed with which we are depositing it in the atmosphere. We are entering a future without precedent.



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As the climate responds to these rapid emissions, the impact on our livelihoods will become so great that millions of people will be displaced. For coral-rimmed nations like Kiribati, Tuvalu and the Maldives, their status as nation-states might be in question. They risk losing their territory, viability for growing food or producing fresh water – which for all intents and purposes renders them uninhabitable. For these reasons, the Intergovernmental Panel on Climate Change (IPCC) noted 26 years ago that the gravest effect of climate change might be the migration of peoples from one sensitive place to another.

The plight of the 'climate refugee' is now emerging as a policy priority. Current estimates suggest that between 25 million and 1 billion people are victims of climate-induced migration. However, the lack of reliable data hinders our ability to understand the influence of climate impacts on short- and long-term displacement of people. For a start, the timescales used are inconsistent. While many predictions use 2050 as a benchmark year, others use 2010. In addition,

few have been clear as to whether they are describing the cumulative number or annual flow – or both – of climate migrants. Clear numbers are needed to raise awareness of the emerging crisis and to compel decision-makers to respond swiftly and appropriately. In turn, funding for research to produce these numbers is necessary, but so far lacking. Philanthropic support for research that can produce robust numbers and explore viable policy responses is critical.

Negotiators took up the issue of migration in Paris but the proposal to create and fund a climate change displacement coordination facility was not realized. The facility could have coordinated efforts to address the needs of those displaced by climate-related extreme events and planned for organized relocation, which might minimize the suffering that often accompanies displacement. Philanthropic organizations can serve as an important, additional advocate for establishing – and appropriately capitalizing – coordinating facilities to ensure peaceful and productive transitions for sending and host communities.

The need for diverse and creative funding has also been revealed by the experience of resettlements and planned relocations thus far, most notably in the Carteret Islands of Papua New Guinea. Some 2,000 people are in the midst of permanently resettling from their tiny islets in the Carteret Atoll to mainland Bougainville. In coping with the loss of their home and culture, they have had little financial assistance from the international community. And while they seek refuge on higher ground, they also need opportunities for economic development and self-reliance.

Self-reliance is contingent not only on the removal of obstacles presented by various layers of government, but also on an adequate amount and a more expansive view of climate-related funding. The islanders relied on small amounts of seed money, including small grants from the Global Greengrants Fund, to craft their 18-step relocation process – including community profiling and assessment that resulted in land ownership, beginning home building, and exploring sustainable economic development.

Adequate funding is absolutely essential to address the challenges of climate-induced migration. It facilitates the necessary studies for proper planning. It supports the participatory processes central to community engagement and it facilitates a successful resettlement process with dignity and long-term self-reliance as a paramount goal.

We now look to a future without precedent. The potential transformative role of philanthropy is needed because, while displacements seem inevitable, just ones are not guaranteed. There is an important opportunity for the philanthropic community to supplement institutional sources of funding. In so doing, philanthropy can help to safeguard some degree of dignity and self-determination as migrants – and, ultimately, all of us – approach the unknown. @

Maldivian Underwater Cabinet Meeting prior to the COP 15, 2009.



Pacific Islands on the frontline of climate change

Michael Donoghue

The Pacific islands are large ocean states that cover over 10 per cent of the global ocean, and include over 33,000 different islands. The people who live on them contribute less than 0.03 per cent of the world's total greenhouse gas emissions, but they are on the frontline of climate change and the most vulnerable to its impacts. The region is also home to most of the world's large Marine Protected Areas. Any damage done to these areas is likely to be felt by the rest of us.



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According to the Inter Governmental Panel on Climate Change (IPCC), ocean warming accounts for more than 90 per cent of the energy accumulated between 1971 and 2010, and this is causing profound changes in the Pacific Ocean. As the ocean warms, it expands. Predictions from the IPCC of a rise in sea levels of up to one metre by 2100 spell disaster for islands whose highest points are between three and four metres above sea level. Destructive extreme weather events threaten the region each cyclone season. In February 2016, for example, Fiji was struck by Cyclone Winston, reportedly the most powerful cyclone ever in the Southern Hemisphere.

Pacific Islanders' food security is threatened by droughts and salt water inundation. The effects of warming seas and ocean acidification mean that the region's coral reefs, one of the world's most productive ecosystems and the basis for the islands' food security, are under threat. Corals can tolerate only a small degree of warming before they bleach and die. Most shallow-water coral reefs can cope with a rise of 1.5°C,

Corals can tolerate only a small degree of warming before they bleach and die.

but they will die after a 2°C rise, which is why Pacific islands are insistent that warming must be limited to no more than 1.5°C. For them, the difference between 1.5°C and 2°C is a matter of survival.

What is happening to counter this? The Pacific Islands Partnership on Ocean Acidification, funded by the governments of New Zealand and Monaco, has undertaken a vulnerability assessment of countries most likely to be affected, and provides the basis to safeguard ecosystems such as seagrass beds that provide natural protection against acidifying seawater. The Secretariat of the Pacific Regional Environment Programme (SPREP) and other regional agencies are engaged in a multitude of activities to support Pacific island communities in their efforts to deal with climate change. Digital and satellite technology is making possible the monitoring of huge protected marine areas such as the Phoenix Islands in Kiribati and Palau Marine Sanctuary.

There are numerous opportunities for philanthropic organizations and social entrepreneurs to contribute to these initiatives. Several foundations have already made lasting commitments in the Pacific islands region. Oceans Five, a consortium of philanthropic foundations, including Oak, Marisla, MacArthur and DiCaprio Foundations, has supported the establishment of large Marine Protected Areas in the Cook Islands and Niue. One Reef (onereef.org) negotiates agreements with communities in Micronesia to establish protected areas and achieve sustainable management of coral reefs. The Pacific Islands Round Table for Nature Conservation provides a forum for encouraging engagement by philanthropic organizations.

Without assistance from the rest of the world it is unlikely that the children now growing up in the atolls of the Pacific islands will grow old there. The Pacific Ocean, the lifeblood of island communities, is under threat. But these impacts are not isolated. What is happening to them and their ocean will soon happen to the rest of the planet.

'Investing in the protection and better management of our natural systems is a crucial response to climate change,' says Kosi Latu, director general of the SPREP 'Nearly all the world's large Marine Protected Areas are in the Pacific islands, safeguarding vital ecosystem services such as oxygen production and providing food for all on earth.'



EDNA ALLEN

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Global food system lacking in Paris Agreement

GRAIN Collective

The global food system – the processes and infrastructure to feed populations – is one of the main drivers of climate change. Yet the issue is hardly talked about at the climate summits that governments hold every year. Why?

GRAIN supports small farmers and social movements in their struggles for community-controlled and biodiversity-based food systems. See www.grain.org

The food system relies mostly on fossil fuel energy. The chemical fertilizers and pesticides, the mechanization of farms, the pumping up of water for irrigation – all emit huge amounts of greenhouse gases into the atmosphere. There is also the deforestation caused by ever-expanding industrial plantations; the soil erosion caused by unsustainable practices; the transport, processing and freezing of food produced in faraway places; and the tremendous waste of energy in the increasingly centralized corporate retail and supermarket systems. Our research calculates that the global food system, which includes agriculture, is responsible for 44–57 per cent of global greenhouse gas emissions.¹

It doesn't need to be this way. A shift over the next 50 years to healthy ecological farming practices focused on returning organic matter to the soil could capture around 24–30 per cent of current global greenhouse gas emissions. It could also create a more productive and sustainable system for providing enough food for a growing population.² Prioritizing local markets and fresh produce would reduce the need for long-distance transport, freezing and processing. Agrarian reforms aimed at supporting small-scale food producers would give back the land to those who produce food rather than those who produce commodities. It would support local initiatives to recuperate indigenous seeds, knowledge and farming systems and global peasant movements that develop new ways of producing food.

In spite of this, the issue is virtually absent from governmental climate negotiations. Government officials seem content to bet on financial carbon markets and other 'solutions' which can make the problem worse. In the official negotiations and seminars at the Paris Summit in December 2015, the most powerful actors

on agriculture were members of the 'Climate Smart Agriculture Alliance'. This alliance was led by the chemical fertilizer industry, which is pushing the agenda in the wrong direction. Meanwhile, in the streets of Paris, social movements and small-scale farmers' organizations rallied with the slogan 'we can feed and cool the planet'.

What can philanthropy do?

First and foremost, we need to further demonstrate the ways in which the current model of food production and consumption wreaks havoc on our climate. This model is closely tied to fossil fuels and promoted by agribusiness, trade agreements and current farm policies. It is a system that is oriented to produce global commodities for profit, not to feed people. Across the world, NGOs and academic organizations are researching and providing evidence on this, and they need philanthropic support.

Second, as grassroots organizations and farmers' movements struggle with the impact of the industrial food system – seeing the destruction of their forests, fighting pollution of their water sources and losing access to their lands – they are in need of technical support. Sometimes, it's a question of helping to ensure access to international networks and the solidarity they offer. Philanthropy can contribute here too by facilitating these networks and connections.

Finally, we need to build momentum towards alternatives that show how a transformative shift towards ecological food systems, local markets and small-scale agriculture would make a massive

contribution both to solving the climate crisis and to feeding the world. In some cases, this means challenging development agencies and philanthropic foundations to support bottom-up approaches that empower local communities and respect indigenous knowledge rather than funding top-down and corporate technology-driven agendas in poor countries.

Here again, people, movements and organizations across the world are active and showing the way. They need and deserve our attention and support. @

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1 www.grain.org/e/4357

2 <http://tinyurl.com/GRAINFCCHS>

A call to foundations: divest now

Ellen Dorsey, Sian Ferguson and Clara Vondrich

Climate change amplifies virtually every global challenge – war, migration, drought, disease, food insecurity and poverty. It will transform the arts, culture and education, and shape human progress. Philanthropy faces a historic moment where we must collectively and convincingly respond. One powerful way we can do this is by divesting from fossil fuels and investing in solutions to global warming.



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The historic Paris Agreement set an ambitious target of zero net carbon emissions by 2050. The incontrovertible consequence of this commitment is that three-quarters of known fossil fuel reserves must stay in the ground. The agreement is a blaring market signal that the energy base of our global economy can and must change.

But the pace of change is not nearly fast enough. Renewable energy is growing and the fossil fuel era is winding down, but the transition to a zero-carbon economy is dangerously obstructed by the powerful interests of fossil fuel companies. The biggest companies not only refuse to put the brakes on fossil fuel use, they are shifting into high gear with reckless exploration for new reserves. Don't be fooled by announcements of investment in renewables – they pale into insignificance alongside capital spend on fossil fuels. Their current plans would take the world well beyond 3 °C with devastating effects for humanity.

Governments cannot accelerate the transition to a zero-carbon economy alone. Dramatic, ambitious action is required by the private and non-profit sectors. Philanthropy needs to play a critical role through both its grants and its investments. In an open letter, the presidents of the Hewlett and Packard Foundations cite an urgent need for more philanthropic resources to fight climate change. But they refer to grants only. We have many more tools at our disposal.

Strategic use of philanthropic investments

One major tool is the strategic use of investments – the approximately 95 per cent of a foundation's assets that are not spent on grants or programmes. Divest-Invest Philanthropy was established to catalyse this. Philanthropies from around the world representing over \$12 billion in assets have pledged to divest

from fossil fuels and invest their assets in climate solutions, including renewable energy, energy efficiency, clean tech and energy access. And in recognition that philanthropy can take a lead, the 140 signatories of Divest-Invest Philanthropy were awarded the Nelson Mandela-Graça Machel Innovation Award for Brave Philanthropy in April 2016.

With this commitment, philanthropy joins the global grassroots movement calling on churches, cities, universities, pension funds, insurers and other institutional investors to divest from fossil fuels and invest in the future. Born on campuses in the US, the movement has exploded globally, spreading to virtually every sector. Today, institutional investors with over \$3.4 trillion in assets under management have made explicit commitments to some form of fossil fuel divestment. The global divest-invest movement was cited by Christiana Figueres, executive secretary of the UN FCCC – the United Nations Framework Convention on Climate Change – as a primary driver of success at the climate talks in Paris last December.

The case for divestment/investment is both ethical and financial – and fiduciary.

The ethical case

The ethical argument is a simple one: it is wrong to invest in an industry whose business model is predicated on driving climate change and its harmful impact on the people and the planet. We have a duty to be responsive to the global grassroots movement, doing our part to meet the Paris promise, helping move markets and accelerate solutions. We have a duty to align our efforts with those of our grantees and not the industry driving the problem – one that funded denial of climate science for over 30 years and that today refuses to tender plans to keep the world at the level of warming to which all the world's governments have agreed.

The financial case

The second argument is financial: investors in coal have already felt the burn of supporting a dying industry. This is just a prelude to similar losses in the oil and gas sector as we electrify our power, transportation and industrial sectors with more affordable renewable energy. The Paris Agreement validates analysis by UK think-tank Carbon Tracker and University College London that most fossil fuels cannot be burned. They are stranded assets whose full economic value will not be realized. Yet the industry counts those reserves on its balance sheets, exposing investors to a carbon bubble recently quantified at more than \$1 trillion. Lord Rowan Williams, former Archbishop of Canterbury

and most senior bishop in the Church of England, has called for Cambridge University to divest from fossil fuels, citing the pragmatic, financial case as solid as the moral one.

Policy signals to keep fossil fuels in the ground are intensifying. Over 40 countries and subnational governments have some form of carbon pricing on their books; 90 national governments include carbon pricing as a mechanism for meeting their Intended Nationally Determined Contributions (INDCs) under the Paris treaty. The World Bank and the International Monetary Fund are now advocating that all parties to the agreement implement a carbon price, warning that the Paris promise cannot be met otherwise.

Even without a global and harmonized carbon price system, the value of fossil fuel stocks is declining sharply. The three largest US coal producers have filed for bankruptcy, the US domestic oil and gas industry is in turmoil, and ExxonMobil's credit rating has just been downgraded for the first time since the Great Depression. Heavyweights like Mark Carney, governor of the Bank of England, warn markets about stranded asset risk and the looming carbon bubble.

The fiduciary case

Today, both ethical and financial considerations are aligned and both are consistent with our fiduciary duty as charitable institutions. Philanthropy is not just any investor. We enjoy charitable tax status because of our pledge to serve the public good. Moreover, new regulations from the US Department of Treasury are explicit that mission investing is consistent with fiduciary duty. They are clear that when there is tension between values and maximizing profits, charitable organizations have significant discretion to prioritize the former. New guidance from the UK and Canada is consistent with this – in fact, more and more academic and legal weight suggests charitable institutions may actually have a fiduciary duty to divest from fossil fuels.

Investing in climate solutions

Meanwhile, the global growth in renewable energy is defying expectations. The International Energy Agency underestimated solar's growth over the past five years by 300 per cent. Last year, over three-quarters

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of new energy infrastructure in the US was renewable. A race to innovate breakthrough batteries for transportation and grid storage is under way, and will further disrupt traditional energy markets over the next decade.

Many foundations are joining the ranks of mission or impact investing, but we must do more, faster. We have unique power to accelerate the energy transition and contribute to the 'Clean Trillion' that must be invested annually to avoid the worst consequences of climate change. The divest-invest pledge is a straightforward way to make this contribution.

Divest-invest – our charitable mission demands it

Two billion people today live in extreme energy poverty, standing at a crossroads between dirty and clean energy. The path chosen will have profound implications for them, and the world. If all the world's foundations invested just 1 per cent of their portfolios in clean energy access, imagine what we could do?

In the final analysis, it is our charitable mission that most demands that we divest and invest now. Treating investments and grants as separate is a missed opportunity to put our whole portfolio to work in service to the greatest challenge of our time. It is not enough to divest in silence, as many foundations are doing now.

To stand up, to be counted, this is what the world needs now. We invite you to join the ranks of the 140 foundations and family offices recognized for brave philanthropy. @



A call to foundations: engage now

Mark O'Kelly

To meet the target set by the Paris Agreement, a radical shift in corporate behavior is needed. Foundations can use their influence to drive this forward working with investment managers and engaging corporations.



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While particular missions and approaches may be different, at their heart charitable trusts and foundations exist to deliver positive impact for society and the environment. Traditionally a key mechanism for achieving mission has been through grants – funding other charities to achieve a social impact through their work.

The role of mainstream investments has usually been straightforward for most foundations. The investments generate the income that we use to carry out our charitable activities, whether that's through making grants or direct activities. Alongside this approach, many charitable investors take an ethical stance by not investing their money in industries or sectors that they perceive to be in conflict with their mission, or contributing to the problems they are trying to solve. For example, a health charity may avoid investments in tobacco companies.

In recent years, however, many trusts and foundations have looked at their overall approach and asked if there are further ways to fulfil their mission, such as responsible investment.

Engaging with investee companies

Responsible investment means the investor takes a position as an enlightened asset owner. As such they engage with investee companies, either directly or through investment managers, to encourage positive behaviour and policy and discourage action that has a negative impact on society and the environment. This approach enables the investor to mitigate the financial risks in their portfolio associated with environmental, governance and social factors, as well as producing the returns needed to pay grants and contribute directly to the mission.

At Barrow Cadbury Trust, we believe that engaging with companies is part of being a good steward over our capital and investments, and we have identified

other foundations that want to take a similar approach to investments. One of the areas on which Barrow Cadbury Trust has been engaging with companies is reducing their contribution to climate change. We believe that climate change represents a huge risk to our mission, and to our investments, and think that engagement is needed to change companies' behaviour from 'business as usual' to supporting a low-carbon transition. Preventing catastrophic climate change will require a huge shift in corporate behaviour. If we are to limit temperature rises to a very maximum of 2 °C, as agreed at COP21 in Paris last December, companies across the world will need to transform their business model to ensure that this limit lies at the heart of their business strategy. As owners of the stock of these companies, shareholders are uniquely placed to help make this change happen.

Engagement strategies

The power of responsible investment has long been exercised through engagement strategies. Such strategies include shareholder resolutions, asking questions at AGMs, and collaborative investor engagement. Robust engagement is becoming increasingly popular throughout the investment community. Barrow Cadbury Trust has engaged with investee companies in a variety of ways and seen significant success. For example, last year, along with many other charities, faith-based investors and mainstream asset owners, we supported the filing of the 'Aiming for A' resolutions at BP and Shell on climate risk and strategic resilience, encouraging greater disclosure regarding the risks of climate change on the companies' business models. With the support of company management, these subsequently passed with the support of nearly 99 per cent of the companies' investors.

We've worked closely with partner organizations such as ShareAction – a UK charity that campaigns for a responsible investment system – to understand the quality of company reporting. We've attended meetings with companies to ask their representatives directly about the risks climate change poses to the business and how they are managing them. This year we have also supported the 'Aiming for A' resolutions at several big mining companies, helping send a signal to company management that we want them to take action.

Opportunities abound this AGM season for investors to use their weight to support climate action. For

Responsible investment means the investor takes a position as an enlightened asset owner.

example, a series of resolutions have been filed at US oil giants ExxonMobil and Chevron. These US firms are being pressed to disclose how resilient their portfolios and strategy would be under policy scenarios that restrict global warming to 2 °C, and institutional investors with more than \$6 trillion have already declared their support for this proposal at ExxonMobil.

Climate engagement isn't – and indeed, shouldn't be – restricted to fossil fuel companies. To create a 2 °C economy, investors also need to consider how they can influence other sectors whose transformation will be vital if we are to curb emissions. These include the transport sector, utility companies, finance industry and livestock production, and we have also engaged with automobile companies about their carbon emissions.

Collaborative engagement

As well as taking this approach ourselves, we believe that collaborative engagement with companies by a number of shareholders can be particularly effective. Barrow Cadbury Trust works with like-minded investors through groups such as the Church Investors Group and the Charities Responsible Investment Network. Supported by ShareAction, the Charities RI Network enables its growing membership to learn from each other to develop their approach as responsible investors, to receive training and research on issues relating to our missions and investments, and to engage together with companies to achieve change, on issues ranging from living wages to renewable energy to overuse of antibiotics in our food supply.

Results?

Some investors question the impact of a responsible investment approach. However, engagement has been shown to be effective at influencing companies' behaviour and benefiting both mission and returns. For example, a 2011 study which examined the effect of environmental shareholder resolutions on chemical and petroleum firms' environmental performance found that these resolutions had a significant positive impact, reducing the amount of chemicals released into the environment. Another example is the campaign co-ordinated by ShareAction to get FTSE100 companies to pay wages at the accredited Living Wage Foundation rate. When that work began in 2011 only two of the FTSE100 companies paid this rate. Today, 30 FTSE100 companies are accredited.

We believe that collaborative engagement with companies by a number of shareholders can be particularly effective.



At a system level, various studies show that companies with good environmental and social practices perform better financially. However, engagement is not the only strategy an investor can employ to tackle climate change. Many have championed divesting from fossil fuel companies and reinvesting money in energy sector alternatives. We welcome the publicity arising from the Divest-Invest campaign and will ourselves divest from companies where engagement proves fruitless. Both approaches are creating real pressure on fossil fuel companies, and are aiming at the same goal – a transition to a low-carbon economy and a world with a temperature rise of well below 2 °C.

Corporate engagement is a long game, and instant results aren't always possible – as is the case with a lot of grantmaking. While the passing of the 2015 resolutions at BP and Shell, and other actions achieved through engagement, mark important steps forward, it is vital that investors monitor whether companies are committed to their pledges. If they are not, and if climate promises are not being kept, we must push forward a more ambitious agenda, and make sure our asset managers are on board too. Barrow Cadbury Trust will continue to work with our investee companies and asset managers to see our investments working harder towards our mission, and to drive forward the shift to a low-carbon world, and will do so in collaboration with numerous other investors with a similar aim. We'd be very pleased to talk to other foundations with the same aims. @

Philanthropy's role in mobilizing green finance

Mark Campanale and Iancu Daramus

While a diplomatic triumph, the Paris Agreement must overcome major challenges in its implementation. With the International Energy Agency estimating \$15 trillion of investments required to meet the targets agreed, the philanthropic sector can play a crucial role in mobilizing finance for success, divesting its own assets from fossil fuels and investing in new and existing sustainable energy sources, while promoting robust capital markets which can deliver an economy geared to preventing dangerous climate change.



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Philanthropic organizations can encourage the rebalancing of capital markets to take account of climate risk. The arguments are clear: to limit the disastrous effects of global warming, two-thirds of listed fossil fuel resources are effectively 'unburnable' and must stay in the ground. Much-needed climate policies and technological advances will leave these resources 'stranded', meaning the world's stock markets and pension funds are effectively sitting on what the independent financial think-tank Carbon Tracker coined 'a carbon bubble'.¹ Simply put, fossil fuels represent risky investments.

Philanthropy made a crucial intervention in climate research by enabling Carbon Tracker to link the concept of a 'carbon budget' to capital markets, funding research the mainstream was unwilling to engage in. Turning an abstract scientific concept into precise numbers for financial analysts to evaluate had the effect of bringing investors and shareholders into the climate challenge. Within four years of Carbon Tracker's first report, Mark Carney, governor of the Bank of England, was warning of the financial risks of climate change. Meanwhile, the G20's Financial Stability Board has begun to draw up guidelines on how companies and asset holders should 'stress test' their investments against different climate scenarios and publicly disclose their risks.

As well as engaging investors and regulators, the philanthropically funded research also helped to trigger a powerful social movement in favour of divestment (see p50). In the same four years, over \$3.4 trillion has been pledged to fossil fuel divestment, by groups as diverse as the Norwegian Sovereign Wealth Fund, AXA and Storebrand.

Foundations have been essential to the process, representing a quarter of the total divestment commitments.² Undoubtedly, actors in the philanthropic sector are ideally placed to leverage their financial clout and strong networks to achieve meaningful change. In Europe, for example, the Ashden and Mark Leonard Trusts have galvanized over 30 foundations worth over \$8 billion to divest. Moreover, the argument that divestment is ineffective because there will always be buyers for the divested stock is quickly losing ground – the Bank of England has admitted investors shunning fossil fuels could be one of the drivers of the oil price slump.³

But divestment alone is not enough. It must be accompanied by a steady stream of investment into low-carbon technology. Not just into R&D for an 'energy miracle', but also into the *deployment* of currently available technologies and best practices. As we speak, developing countries are making key choices that could lock in high-carbon infrastructure for decades. Low- or zero-interest loans can leverage finance by a factor of 50,⁴ and there is no shortage of innovative scalable products to invest in. The Global Innovation Lab for Climate Finance offers examples, from water financing to hedging against currency risks for climate projects.

Clearly, there is growing interest in the conversion of national commitments – Intended Nationally Determined Contributions (INDCs), agreed in Paris – into targeted investment. The Call to Action on Climate Finance, another philanthropically funded group of global climate finance and responsible investing organizations, has put forward a three-point framework of measures to encourage long-term capital allocation from financial markets alongside public finance.⁵

Post Paris, there is growing momentum for green finance. The philanthropic sector has been at the forefront in aligning values and investing, and must continue to lead the way. @

1 <http://tinyurl.com/carbon-bubble-pdf>

2 <http://gofossilfree.org/commitments>

3 <http://tinyurl.com/Bank-fossilfuels>

4 <http://thinkprogress.org/climate/2016/02/23/3752421/bill-gates-wrong-energy-miracles>

5 <http://calltoactiononclimatefinance.net>

Philanthropists: come on board the (carbon-neutral) train

May Boeve and Bill McKibben

For years, we in the climate movement struggled to find actions to match the scale of the problem. Changing lightbulbs, more bike riding and less flying were insufficient. Through the fossil fuel divestment movement, we are operating at a scale big enough to matter. Moreover, you don't have to be an investor to call for divestment. The movement includes thousands of activists all over the globe, who are asking boards of trustees of universities, pension funds, municipal funds and private investors to rid their portfolios of fossil fuel investment. Foundations – some of them – are playing an important part in this, too, by supporting those activists and by shedding their own investments. We'd like to see more of this.



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The fossil fuel divestment movement took its inspiration from the divestment movement that helped bring down the Apartheid regime in South Africa. Like that movement, it provides a clear way for individuals and institutions to make a moral choice about a critical question of the day. To date, more than \$3.4 trillion of assets under management have made a divestment commitment of some kind.

350.org became involved in this effort in 2012 with the 'Do the Math' tour, helping to launch more divestment campaigns in the US. Now we are working towards divestment victories on every continent save Antarctica. Three months before the COP21 Conference, we attended a Divestment Conference in Paris organized by the European Green Party. It illustrated how

far the movement had come. We heard how, in the Netherlands, Urgenda had sued the government for its inaction on climate, and won. We met divestment leaders from Belgium, Switzerland and throughout Europe who are working to convince pension boards and local authorities to divest. Different battles are being fought in different places and that is precisely the strength of the divestment effort. It is distributed organizing, tied together with a simple but powerful demand: to de-legitimize the fossil fuel industry and force institutions of conscience to pick sides.

At the time of the Paris Divestment Conference none of us had any idea that the call for '1.5 to stay alive' would take hold and find its target in the final agreement. That cry had animated the first years of our fight at 350.org (our name is taken from 350 parts per million, roughly equivalent to calling for 1.5 °C of warming).

Philanthropy's contribution – actual and potential

The divestment movement is a movement of great diversity. It has taken off on hundreds of university campuses, in faith communities, in cities and among foundations.

Foundations have been critical to the movement's growth but we think they could play an even bigger part. In the coming years, we want to see more action from foundations both as investors themselves divesting from fossil fuels and as funders of work on climate change. The Rockefeller Brothers Fund and Wallace Global Fund helped lead the divestment charge, one by symbolically divesting an oil fortune, the other by organizing peers to follow their lead. The Divest-Invest initiative has drawn dozens more foundations into the movement.

The scale of philanthropy directed towards climate change now needs to increase given the severity of the issues. We are particularly glad to see growing support for movement-building efforts and grassroots

Occupying the president's office.





organizing.¹ Efforts such as the Building Equity and Alignment Initiative in the US have helped push in this direction and we are excited to see what Oak Foundation's climate justice initiative will bring to the table (see p29). We attribute many of the shifts in climate advocacy – indeed, the ability to achieve a global agreement – to a more powerful and diverse lobby to combat climate change. Many foundations have contributed to this, and many of them are the same ones who have taken up the call to divest.

So far, however, 'big philanthropy' is not sufficiently involved. Many foundations, including some of the largest environmental funders, have not divested from fossil fuels – though we know the topic has been raised in many a boardroom. Some see it as a sort of gesture politics, and gesture for gesture's sake is indeed not useful, but in this case it's a gesture that matters politically.

The divestment movement has helped to bring into the mainstream the basic argument that we must leave carbon in the ground. Three years ago it was primarily divestment campaigners making this point; by Paris, it was the world's central bankers and diplomats. By adding its weight to the movement, philanthropy can help build greater momentum. Using research to further advocacy is one approach. For example, the Canadian research group Corporate Knights pioneered an important study calculating the

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potential loss in portfolio gains for foundations that did not divest.

Moreover, divestment itself encourages and supports the climate change movement; it builds leadership. We would encourage all foundations that support climate advocacy of any kind to sign the Divest-Invest pledge and take the necessary steps to jettison portfolios of oil, coal and gas investments within five years.

Keeping the movement moving

Following COP21, we have an agreement that leaves us wanting more. Activists and social movements will use the Paris Agreement to force the action we need. We are looking ahead to waves of mass actions that will target the world's most dangerous fossil fuel projects in order to keep oil, gas and coal in the ground, and accelerate the transition to 100 per cent renewable energy. Everywhere, we will call attention to how it cannot possibly be compliant with what was agreed in Paris to then allow, say, 50 new coal plants in Turkey, continued oil development in Nigeria, or massive gas build-outs in Brazil.

Movements move – so, pleased as we are to have left Paris in 2015 with an agreement, we are even happier to be dusting off our marching clothes to get back onto the streets. And we'd like philanthropy with us, in body as well as in spirit, supporting our cause and leading by example. @

¹ <http://tinyurl.com/CultivateGrassroots>

For more information

Information on all active campaigns can be found at www.gofossilfree.org

Endnote

Nnimmo Bassey, Terry Odendahl and Michael Northrop

We hope that readers of the essays in this issue see renewed commitment, hope and determination about philanthropy and civil society's role in addressing the profound threat that we face. While each of us brought different perspectives and viewpoints, we believe that there is an increasingly broad consensus on climate change and climate philanthropy after Paris.

Nnimmo Bassey, Terry Odendahl and Michael Northrop are guest editors for the June issue of *Alliance*.

- ▶ The Paris Agreement was an important first step. We have agreed there is a problem, and agreed that we need to work towards a solution. The world has spoken and the world has listened. The devil is in the details, as they say, and we can and will continue to tangle over the details, but at least there is a world consensus that action must be taken.
- ▶ Emissions need to be cut sooner – with peak emissions no later than 2020 – or we will pass 1.5°C. We are running out of time to avoid even more serious impacts from climate change. We

need deeper and faster emissions cuts than were agreed to in Paris. We all agree that it is a problem that the cuts proposed in the Paris Agreement were 'voluntary' and non-binding.

- ▶ Local people and local governments – especially mayors and governors – can lead the global push for stronger action and deeper emissions cuts. Some of us want the focus on localized action and support to be dramatically increased. We see local solutions in grassroots and indigenous cultures that we want highlighted.
- ▶ Divestment from fossil fuels is a viable strategy to influence public policy. Foundations, universities and other asset holders must accelerate this push. That requires bold action. Some of us think we must publicly and aggressively confront the fossil fuel industry in order to make an impact on emissions.
- ▶ At the same time that fossil fuel investments – especially in coal – are being dialled back, investment in clean energy solutions is being mobilized in impressive ways globally. This trend needs amplifying.
- ▶ Civil society groups need more funding to increase the pressure. This funding can help advance public policy, encourage clean energy investment, broaden divestment movements, and launch civil actions to create change. Some of us go further and want funding to be more intensely focused on advocacy, including civil disobedience and other forms of direct and confrontational democracy.

As we continue the journey from Paris, what we find most hopeful is an increasing realization that philanthropic foundations have key roles to play, and can be much more determined and intentional in their engagement. The financial power of the industries that are causing climate change dwarfs the financial resources we philanthropists bring to the table. By working together, we can amplify the voice and power of civil society and ensure that the necessary measures are taken before it's too late. @

High water on Piazza San Marco, Venice, in November 2010. This happens several times each year due to rising seas.

