SEIZE YOUR POWER
INVESTING IN A SUSTAINABLE FUTURE
Humanity is waking up to the damage that fossil fuels inflict on our planet, and financial institutions are becoming aware of the economic unsustainability of our addiction to coal, oil and gas. This is taking place at a critical juncture, when investors’ decisions will affect our world for generations to come. Against this backdrop, WWF is launching a global public campaign, challenging investors to commit in the next 12 months to an additional US$40 billion for renewable energy by 2017 and to not invest in fossil fuels, particularly coal. This amount will come from new and influential actors as a starting point to go beyond business-as-usual investments.

Major effort is required to reach the US$1.4 trillion1 worth of investments that must be made in renewable energy in the next four years, to help put our planet—and our financial systems—onto a course of sustainable recovery. WWF calls on financial leaders to publicly commit to this goal, and for everyone invested in the financial system to thoroughly scrutinize their energy investments.

It is a scientific reality that fossil fuels pose an unprecedented threat to nature and humanity alike. What is now being discussed is that renewable energy can meet the world’s needs. Clean, sustainable energy can stabilize financial markets, significantly reduce volatility, create more jobs and increase global wealth in a more equitable way. Governments know this. So do energy companies, who are lobbying to protect their own—often misguided—financial interests in fossil fuels.

The window of opportunity for us to make investment decisions towards a positive, sustainable energy future is closing fast. The International Energy Agency (IEA)’s 2012 World Energy Outlook warns that if we do not take action quickly on our energy choices, all allowable CO2 emissions could be locked in by existing fossil fuel energy infrastructure by 2017ii. Only significant energy efficiency advances could delay this lock-in to 2022. John Podesta, founder of the Center for American Progress, made this clear when he told WWF, “Investing in oil, coal, and gas is no longer an acceptable way to fuel growth. The only responsible course of action for our planet and our economy is a total transformation of global energy systems from highly polluting fossil fuels to clean, renewable energy. That transformation must start now.”

We cannot delay divesting from high-carbon fuels and investing in renewable energy. This urgency has inspired WWF to challenge targeted financial institutions, development banks and pension funds to commit by June 2014 to placing at least US$40 billion of new investments—beyond business as usual—into renewable energy and the commitment not to invest in fossil fuels, particularly coal.

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This is an achievable goal, given the growing recognition of renewable energy’s greater value of sustainability. International investors have spent over US$8 trillion on renewable energy, energy efficiency and smart energy technologies in less than a decade. More than a quarter of that was spent in 2011, the first year that renewable energy investments surpassed those in power plants for fossil fuels. While the scale of investments has remained steady, we must go much further.

Looking at the latest Intergovernmental Panel on Climate Change (IPCC) analysis, we calculate that US$8 trillion of renewable energy investment is needed between now and 2050 to help curb dangerous climate change. Bloomberg New Energy Finance projects business-as-usual renewable energy investments of about US$250 billion annually over the next four years. That will bring us only partway there. We believe that our goal of US$8 trillion, particularly if coming from new and influential actors, will help tip the balance, raise awareness, and take us closer to where we need to be in the next four years, while contributing to greater needs over the long-term. It is the responsibility of every financial decision-maker and stakeholder to carefully consider how their investments are shaping the direction of the energy industry. Investments in coal, oil, and gas are still growing and are four times greater than those in renewable energy – this balance has to change. We must substantially reduce and phase out those investments.

In addition to a deepening appreciation of renewable energy, concern is spreading within the financial community about fossil-fuel companies whose key assets – coal, oil or gas reserves – are already too plentiful to burn.

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Jens Peers, CIO Sustainable Equities of Mirviva, a division of Naticia, of French Group BPCE, avoids high-carbon investments, yet emphasized the influence that asset owners can take to the boardrooms of fossil fuel companies. “If you are an investor in these companies you should use your power as a shareholder to encourage the development of investment in clean alternatives by saying that you don’t want your money to be used to look for new reserves.”

He also said that regulators should push these companies to disclose the amount of carbon dioxide embedded in their reserves, so that investors can make better-informed decisions about what can or cannot be sold. “Those [reserves] that can’t shouldn’t be part of the valuation. That’s currently not the case today.”

Carbon Tracker’s co-founder, Mark Campanale, said fund managers are being forced to take a hard look at their role. “Do their duties lie in seeing all the reserves developed because they have to maximize their returns? If so we’re going to go beyond 6°C. And then they will face significant capital losses in other areas of their portfolio—their insurance exposure, agricultural investments, infrastructure investments. Particularly real estate, because at that level of warming you lose Manhattan and London.” If, on the other hand, their fiduciary duty is to maximize well-being and what Campanale called “a world worth retiring into, pension fund managers and other asset owners should use their power to change the status quo. He said many are still waiting, ‘thinking they can jump off the train before it goes over the cliff.’”

When economic and scientific analyses demonstrate that the existing reserves of fossil fuels are more than the planet can bear, it would seem hard to justify greater investment into expanding those reserves. Nonetheless, companies spent close to US$674 billion in 2012 doing just that—“money that could have been invested in developing alternative energies we will actually be able to use.”

When we look at the big picture of fossil fuel subsidies – including producer subsidies, carbon externalities, and artificially reduced value-added taxes globally – that figure is closer to US$8 trillion annually, according to the International Monetary Fund (IMF), equivalent to almost 10 per cent of all state budgets.

The negative impact of investment in fossil fuels is increasingly clear. The World Health Organization estimates that climate change now causes more than 150,000 premature deaths each yearxii. In 2012 alone, Hurricane Sandy had a price tag of US$65 billion, while the US drought cost US$35 billionxiii. As the world starts to realize the long-term financial value of biodiversity, an analysis in Nature magazine should come as a further wake-up call: up to one-third of all animal species could be “committed to extinction” because of global warmingxiv. With robust social and environmental safeguards, the world can ensure a sustainable energy source and avoid these impacts.

Dr Birol emphasized that governments must send the right message to investors so that they shift their money to renewables – by creating incentives, stable policy and finance to compete.” But when we look at the big picture of fossil fuel subsidies – including producer subsidies, carbon externalities, and artificially reduced value-added taxes globally – that figure is closer to US$8 trillion annually, according to the International Monetary Fund (IMF), equivalent to almost 10 per cent of all state budgets.

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There is a definite momentum towards renewables. Several cities are leading the trend. This is significant as cities are responsible for more than two-thirds of carbon dioxide emissions\(^{xx}\), but also because cities can swiftly change their investment strategies while also engaging their constituencies in driving that change.

As former Toronto Mayor and incoming CEO of WWF Canada David Miller pointed out, "Cities are financial leaders in their own right. They can move their own investments, clean up their pension funds, and — perhaps most importantly — bring their citizens along."

Many high-profile cities have chosen the renewable energy path. Ten American cities recently asked their pension funds to divest from fossil fuel companies\(^{xvi}\). This list includes Seattle, Ithaca, Richmond — home to an oil refinery that California’s biggest emitter of greenhouse gases — and San Francisco, which is working towards a goal of 100 per cent renewable energy within a decade\(^{xxvii}\). Approximately 140 countries now have renewable energy targets, providing more certainty for investors.

The trend towards renewables has also been notable in emerging economies, which accounted for almost half of total clean energy investments in 2012. Developing countries need to power their growth, while considering that their energy choices will impact pollution, health, security, agriculture, water availability and the cost of frequent and extreme weather events.

Developing countries already seeing serious moves toward renewable energies include: China, India, Brazil, South Africa, Uganda, Madagascar, Tunisia, Mexico, Morocco and the Philippines\(^{xxi}\). Even oil-rich Saudi Arabia is planning to harness power from the sun and wind. Many have spectacular potential to use alternative energy sources. South Africa stood out in 2012 by investing about 1 per cent of its national GDP into renewable energy\(^{x}\). As Energy Minister Elizabeth Dipu Peters told us, “If we can, as a government, enable more renewable energy investment, then we will. In fact, we are. South Africa has already committed to strong renewable energy policies — that means a strong future for all of us. South Africa will work hard to realize President Jacob Zuma’s call to “prove to the world and ourselves that Renewable Energy can be a base-load.”''

China, the world’s highest emitter of greenhouse gases—and where heavy air pollution has made global headlines—was also responsible for one-quarter of global investment in renewable energy last year, close to US$70 billion\(^{xv}\). Michael Leubreich said that until recently the country was constructing twice as many new coal-fired power stations as it is now. “More than half of what China is building already is clean, and people don’t realize this.” Economics is the one reason for this trend—by investing in alternative energy the Chinese are positioning themselves to be competitive well into the future.


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India has become the world’s fourth largest carbon emitter\footnote{Le Quéré C et al. Earth System Science Data. 2012. The global carbon budget 1959-2011. Discussion paper. 5, 1107-1157. 1202 pp. (http://www.earth-syst-sci-data-discuss.net/5/1107/2012/essdd-5-1107-2012.pdf)}, but is also ranked fifth in the world for its renewable-energy based power capacity\footnote{Ramachandra TV, Jain R, Krishnadas G. Renewable and Sustainable Energy Reviews. 2011. Hotspots of solar potential in India. Introduction. 15, 327-336. (http://www.ces.iisc.ernet.in/energy/papers/hotspots_solar_potential/introduction.html)}. “We need to more than double our capacity in order to be able to provide energy to everyone,” Joint Secretary Tarun Kapoor of the Government of India’s National Solar Mission explained, “and to achieve that we will depend largely on renewables.”

For governments who are considering how to provide power to the 1.4 billion people around the world who currently don’t have electricity\footnote{United Nations Development Programme. Our work, Environment & Energy, Focus Areas, Sustainable Energy, Universal access to modern energy for the poor. (http://www.undp.org/content/undp/en/home/ourwork/environmentandenergy/focus_areas/sustainable-energy/universal-access.html). Accessed July 2013.}, renewables offer a financially and environmentally sound road to a better future. The International Monetary Fund estimates that if we move just US$850 billion annually into clean technology investments and support in developing countries, we will overcome energy poverty.

\textbf{WWF’S PERSPECTIVE}

Climate change is threatening up to 1/3 of animal species with extinction. While the impacts of global warming are only just starting, the decisions that are influencing those impacts are being made now.

Climate change threatens to undo everything that conservation organizations like WWF have achieved over the last half-century. Polar bears may make the headlines, but in reality very few species will be unaffected by a changing climate.

Many species could become extinct. Even entire ecosystems – such as coral reefs, mountain habitats, and large blocks of tropical rainforests such as the Amazon – could completely disappear. Some plants and animals that have adapted to their environment over millions of years are vulnerable to even slight changes in temperature and rainfall. Warming and acidifying seas threaten coral reefs and krill – the basis of the marine food chain in many parts of the world. Large mammals like whales may be forced to travel further in search of food, often leaving the safety of the protected areas that WWF and others have fought so hard to secure.

Exploration for oil, coal and gas – and the transportation and infrastructure associated with it – is also a threat to many species. These activities include coal port expansion on the Great Barrier Reef, oil exploration on the edge of the Congo’s mountain gorilla habitat, and crude oil marine export off the lush west coast of Canada. In each of these places, we risk wildlife being a part of the price we pay for our current investment decisions. It doesn’t have to be this way.

Human beings will not be immune to the consequences of a changing climate. WWF’s mission is to protect the magnificent array of living things that inhabit our planet and to create a healthy and prosperous future in which humans live in harmony with nature. Solving the energy crisis is fundamental to this, whatever tough choices and challenges it brings.

Sign the pledge and join us at: wwf.panda.org/syp
Why energy finance matters

US$1.4 TRILLION
Approximate amount of renewable energy investments needed in the next four years to sufficiently start addressing climate change

1/3
Animal species at risk of extinction from climate change impacts

2°C
Levels of global average temperature rise beyond which scientists expect extremely bad and probably irreversible impacts of climate change

2/3
Portion of all remaining fossil fuel reserves must stay in the ground if we are to avoid dangerous climate change

Why we are here
To stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature.