

A Fossil Fuel Non-Proliferation Treaty

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The Rapid Transition Alliance

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About the Alliance

Things change. It's one thing we can rely on. But our environment is changing faster than we are. We need to speed up. The *Rapid Transition Alliance* is a global initiative learning from where, when and how good things happen quickly. We're gathering and sharing evidence-based hope, to remove excuses for inaction.

We will launch formally later this year, but already have over 35 organisations signed up that share our vision of the possibility of rapid transitions.

<https://www.rapidtransition.org/>

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Summary

Publication of the IPCC special report on global warming of 1.5 degrees concluded that only “rapid, far-reaching and unprecedented changes in all aspects of society” can deliver the globally agreed target. This suggests the need for a new line in the sand especially in the already industrialised countries where any growth of fossil fuel dependent infrastructure will be clearly incompatible with meeting the 1.5 degree target. Therefore, to underpin the existing climate agreement, and to exert influence over the immediate choices of policymakers, at the very least, the new findings of the IPCC mandate a moratorium in rich countries on any further expansion of fossil fuel industries, or any infrastructure dependent on it. This moratorium could be realised as a *Fossil Fuel Non Proliferation Treaty*.

1. Where are we now?

The recent IPCC SR15¹ makes clear that realising the ambition of the 2015 Paris Agreement to keep global warming below 1.5°C requires a dramatic re-wiring of the global economy and wider changes in society to ensure deep decarbonisation and enhanced resilience to the effects of climate change. A crucial, yet neglected, aspect of this is the need for agreements and law which effectively and fairly leave large swathes of remaining fossil fuels in the ground.

SR15 highlights the need to intensify and scale up efforts. Limiting warming to 1.5°C requires transformative systemic change, involving the upscaling and acceleration of far-reaching climate mitigation across all regions and sectors. Accelerated and stronger short-term action and enhanced longer-term ambition going beyond the current round of Nationally Determined Contributions (NDCs) is needed for 1.5°C-consistent pathways.

Assuming full implementation of unconditional NDCs, and a continuation of climate action similar to that of the existing NDCs, global average temperature will increase 2.9–3.4°C above preindustrial levels (UNEP 2017). This will lead to devastating consequences, especially for the poor and vulnerable and those who have contributed least to the problem of climate change.

While transitions are underway in various countries, limiting warming to 1.5°C will require a greater scale and pace of change to transform energy, land, urban and industrial systems globally. Progress is being made, but not fast enough. There is an urgent need for more rapid and deeper transitions to limit warming to 1.5°C. Such transitions have been observed in the past within specific sectors and technologies. But the geographical and economic scales at which the required rates of change in the energy, land, urban, infrastructure and industrial systems would now need to take place, are larger and have no documented historic precedent. We are in uncharted territory and need bold solutions equal to the scale of the challenge.

2. Where do we want to be?

The need for rapid transitions in energy systems

¹ Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

The IPCC SR15 shows that the energy system transition that would be required to limit global warming to 1.5°C is underway, at least embryonically, in many sectors and regions around the world. For example, the political, economic, social and technical feasibility of solar energy, wind energy and electricity storage technologies has improved dramatically over the past few years. Moreover, the speed and scale of transitions and of technological change required to limit warming to 1.5°C has been observed in the past within specific sectors and technologies.

But the geographical and economic scales at which the required rates of change in the energy, land, urban, infrastructure and industrial systems would need to take place, are larger and have no documented historic precedent. Historical parallels need to be deployed with caution, but can shed light on the possibility of rapid shifts in policy, finance, infrastructure and behaviour (Kern and Rogge 2016; Sovacool 2016; Simms and Newell 2017).

As the 1.5°C pathways require reaching carbon neutrality by mid-century, the NDCs alone are not sufficient, as they have a time horizon until 2030, are not legally-binding internationally and are often short on implementation detail (Newell & Phylipsen 2018). Accelerated and stronger short-term action and enhanced longer-term national ambition going beyond the NDCs would be needed for 1.5°C-consistent pathways. But the NDCs can, nevertheless, set in place policies for the managed decline of fossil fuels through moratoria on new extraction and the managed decline of existing infrastructures and investments (SEI 2018).

Accelerating transitions

The available literature indicates that 1.5°C-consistent pathways would require robust, stringent and urgent transformative policy interventions targeting the decarbonisation of energy supply, electrification, fuel switching, energy efficiency, land-use change, and lifestyles. A variety of 1.5°C-consistent technological options and policy targets propose technology and policy options that include energy demand reduction, greater penetration of low-emission and carbon-free technologies as well as electrification of transport and industry, and reduction of land-use change. The increase in roof-top solar and energy storage technology as well as the increase in passive housing and net zero-emissions buildings and high growth rates in electric vehicles and electric transit show what is possible. The drive towards such lower carbon pathways would be greatly enhanced if it was clear that the further expansion of fossil fuel pathways is ruled out. This would have the immediate effect of gearing all investment, planning and infrastructural decision-making towards low carbon options.

Building just transitions

Building ownership, inclusion, and civic participation is vital to make sure pathways out of fossil fuels are not abandoned (Newell and Mulvaney 2013; Swilling and Anneck 2012; UNFCCC 2016). International moves to leave large swathes of remaining reserves of fossil fuels in the ground present significant challenges in terms of managing decline of key industries which employ large numbers of poorer workers. There are numerous just transitions plans and strategies that have been proposed and developed in sectors such as coal,² involving trade unions and affected communities and focussed on issues such as retraining and compensation (JTA 2018) and the equitable pursuit of clean energy (Newell, Phillips and Mulvaney 2011).

² <https://www.iddri.org/en/publications-and-events/report/lessons-previous-coal-transitions>

Targeted interventions which generate a series of socially dispersed benefits are useful in this regard. For example, efforts to target air quality bring health and local environmental benefits as well as reductions in GHGs. According to the World Health Organisation over 90% of the world's population suffers toxic air which kills 7 million people a year.³

Building in co-benefits and creating pro-poor transformations from the start makes success more likely in this regard as experience from the energy sector has shown (Ockwell and Bryne 2016). There are many examples of how countries and regions around the world have sought to deal with these complex issues that countries can learn from as they advance their NDCs and place policies to leave fossil fuels in the ground more centrally in their strategies.

3. How do we get there?

Dismantling the fossil fuel economy

SR15 makes very clear that shifting onto a pathway compatible with 1.5°C is impossible without also withdrawing financial and fiscal support for the fossil fuel economy. The carbon budget for a good chance of staying well below 2°C global warming was 473 Gt of CO₂ in 2016 (see also McGlade and Ekins 2015). We currently have over 500% of that carbon budget in terms of conventional oil, gas and coal reserves (LINGO 2018).

At national level, this requires governments to dramatically reduce subsidies for the production and consumption of fossil fuels and, except for some least developed countries, abandoning most plans to expand the extraction and processing of fossil fuels. The long life-spans of new investments in industries and infrastructures mean that high carbon trajectories could be locked in for decades in a way that is incompatible with a 1.5°C scenario. Transport provides a case in point where shipping, freight and aviation systems have grown rapidly and little progress has been made since IPCC AR5 on replacing fossil fuels. Tough choices have to be made as reliance on fixes like geo-engineering are problematic given their untested nature, and in the case of BECCS (bio-energy and carbon capture and storage), high potential for conflict with competing land uses.

This will also require multilateral funding agencies, such as the World Bank, as well as private financial institutions, to move their investment portfolios away from fossil fuels and strengthen their approach to climate impact liabilities in their lending portfolio. Encouraging in this regard is the World Bank's announcement to end its financing of upstream oil and gas after 2019. Yet between 2011 and 2015 the World Bank doubled its funding for fossil fuels. It has provided USD 1.7 billion in total investments for exploration or projects that included an exploration component during these years (Oil Change International 2016), despite its ambition to lead the world on climate change.

There is a critical need to mainstream climate change much more systematically into the operations of other international economic institutions such as the World Trade Organisation, the International Monetary Fund and regional economic organisations. Donor countries can reinforce this process by requiring that their contributions are earmarked only for low-carbon investments.

³ <https://www.theguardian.com/environment/2018/oct/27/air-pollution-is-the-new-tobacco-warns-who-head>

Disruptive innovation

A variety of technological developments have and will, contribute to 1.5°C-consistent climate action. Rapid socio-technical change has been observed across sectors from transport to energy and beyond. The increase in roof-top solar and energy storage technology as well as the increase in passive housing and net zero-emissions buildings are examples. Governments now need to plan as part of their NDCs to provide financial and R&D support only to those technologies and innovations that have a role to play in bringing down emissions to a scenario compatible with 1.5C. Finance to support these innovations and their deployment and diffusion can come from the redirection of state aid and subsidies to fossil fuels- see below.

This relates to calls for ‘mission-driven’ innovation policies based on national priorities. This is less about ‘picking winners’ and more about discontinuing support to ‘losers’. For example, governments can play a role in advancing climate technology via a ‘technology push’ policy on the technology supply side (e.g., R&D subsidies), and by ‘demand pull’ policy on the demand side (e.g., energy efficiency regulation). They also need to think more innovatively and ambitiously about de-centralised, off-grid and demand reduction strategies rather than assuming business as usual supply from conventional grids, transport systems or approaches to food provision, for example.

Rise of supply side actions

Encouragingly, there have been recent bold moves by governments regarding the increasingly obvious need to leave fossil fuels in the ground. A combination of divestment of finance from fossil fuels by major investors and laws and regulations that many governments have recently shown themselves willing to adopt bold stances such as recent moratoria on new oil exploration and production announced in 2017 and 2018 by a number of countries including New Zealand, France, Costa Rica and Belize, or clear near-term timetables for their phase out as is happening in China. Costa Rica, for example, has a moratorium on oil exploration in place that was recently extended to 2021, the year by which Costa Rica intends to be carbon neutral. There are also moratoria on fracking in a number of jurisdictions globally such as France, Germany, Ireland, Wales, Scotland and Uruguay.

Internationally, there are precedents such as the moratorium in place for mining projects in Antarctica (Article 7 of the Environmental Protocol of the Antarctic Treaty). The International Council on Mining and Metals has committed its members (including the World Coal Association) to not explore nor mine in World Heritage Sites and “respect legally designated protected areas”. Likewise there are calls for banning oil drilling in the Arctic Sea and to halt to exploitation in protected areas and on indigenous lands (LINGO 2018). The Lofoten Declaration⁴ meanwhile, signed by over 500 organisations, highlights the need to put an end to fossil fuel development and manage the decline of existing production while a number of governments have signed up to the ‘Powering Past Coal’ Alliance.⁵

⁴ <http://www.lofotendeclaration.org/>

⁵ <https://unfccc.int/news/more-than-20-countries-launch-global-alliance-to-phase-out-coal>

The Proposal for a Fossil Fuel Non-Proliferation Treaty

A new line in the sand is needed to underpin the existing climate agreement, to exert influence over the immediate choices of policymakers. At the very least, the latest findings of the IPCC mandate a moratorium in rich countries on any further expansion of the fossil fuel industry, or any infrastructure dependent on it. Currently, global demand for coal, oil and gas are all **growing**,⁶ with fossil fuels accounting for 81% of energy use. Worryingly, the International Energy Agency projects total fossil fuel use **rising for decades**⁷ still to come, compromising all climate targets.

A moratorium could take the form of a fossil fuel non-proliferation treaty. The threat of nuclear catastrophe provides a precedent for how, quickly, to stop a bad situation getting worse. The **nuclear non-proliferation treaty** (NPT),⁸ agreed 50 years ago between 1965-68, was a triumph of rapid diplomacy, at the height of cold war mistrust, and against an immense security threat.

We could even adapt the classic “three pillar” structure of the NPT.

The first is “non-proliferation” itself. Climate negotiations and national commitments are not moving fast enough to meet the older 2C climate target let alone 1.5C as IPCC SR15 makes very clear. The first step in the nuclear treaty process was a stock take of who had what weapons. We could make an assessment of those fossil fuel reserves which, if burned, would carry us across the 1.5C warming line, and monitor their non-use and any measures likely to lead to the proliferation of fossil fuels. “The fossil fuel industry knows with some certainty future production often decades in advance,” says **Carbon Tracker**’s⁹ Mark Campanale, “What we need is a global, public register setting out who controls the reserves from where the CO₂ is coming.” SEI (2018) also show ‘the adoption of a simple extraction-based accounting system – in parallel with existing territorial greenhouse gas emissions accounting – could help track countries’ production levels and associated emissions. International agencies such as the UN Environment Programme could also regularly release an analysis (akin to the existing Emissions Gap Report) that would identify whether countries’ aggregate production phase-down targets and policies align with the 1.5-2°C warming limit’. The tools for monitoring and verification are in place.

The second pillar of the NPT is disarmament. This means rapid substitution of clean energy for fossil fuels and the managed decline of existing fossil fuel infrastructures and investments. But “disarmament” would also be delivered by targeting areas with the highest benefits: lowering energy demand, promotion of energy efficiency, measures to address air pollution (see above).

The final pillar concerns the promotion of the “peaceful” use of technology. In a climate context, that would mean massively expanding existing initiatives to provide poorer countries with access to clean energy and the technology needed for development. Funds could be

⁶ <https://www.iea.org/newsroom/news/2018/march/global-energy-demand-grew-by-21-in-2017-and-carbon-emissions-rose-for-the-firs.html>

⁷ <https://www.iea.org/weo/>

⁸ <https://www.un.org/disarmament/wmd/nuclear/npt/>

⁹ <https://www.carbontracker.org/reports/nowhere-to-hide/>

redirected from the staggering \$10m per minute that governments give in fossil fuel subsidies, according to the International Monetary Fund¹⁰ (Skovgaard and Van Asselt 2018).

As far back as 1988 at the Toronto conference on the changing atmosphere, climatic upheaval was described as a threat “second only to nuclear war”, a sentiment endorsed from the CIA to MI5 and the United Nations. National efforts are crucial. But a new fossil fuel non-proliferation treaty, supported by movements calling to leave fossil fuels in the ground,¹¹ would provide a transparent and fair means to stop climate breakdown.

The best way to mark the 50th anniversary of the Non Proliferation Treaty, would be to begin negotiation of its fossil fuel equivalent.

Further reading

<https://www.theguardian.com/commentisfree/2018/oct/23/fossil-fuel-non-proliferation-treaty-climate-breakdown>

<https://www.sei.org/publications/supply-side-climate-policy-the-road-less-taken/>

<https://unfccc.int/news/more-than-20-countries-launch-global-alliance-to-phase-out-coal>

<http://leave-it-in-the-ground.org/exploration-moratorium/>

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¹⁰ <http://priceofoil.org/fossil-fuel-subsidies/>

¹¹ <http://leave-it-in-the-ground.org/exploration-moratorium/>

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