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The University of Cambridge Institute for Sustainability Leadership (CISL) empowers business and policy leaders to tackle critical global challenges. By bringing together multidisciplinary researchers with influential business and policy practitioners across the globe, we foster an exchange of ideas across traditional boundaries to generate new, solutions-oriented thinking.

Ecofys

What began with a fascination for the massive potential of renewable energy, has now turned into more than 30 years of sustainable energy and climate solutions. Since its beginnings, Ecofys has made significant contributions to the global energy debate as well as spurred innovative approaches in climate policy and action.

We know that our mission of "sustainable energy for everyone" can only be realised in a world protected from the worst impacts of climate change. Inspiring cooperation and catalysing more ambitious climate action, Ecofys continues to provide relevant insights from both ends of the climate debate: through monitoring and assessing country pledges as well as analysing and supporting actions taken by non-state actors.

Wedging the Gap

An enormous gap is looming between the current level of ambition on climate change and what's needed to keep global warming below 2°C and head off the associated impacts.

This work seeks to help 'wedge' this 2020 emissions gap through a co-ordinated effort to identify, analyse and support the scaling-up of a series of bottom-up initiatives. Together these initiatives could deliver sufficient proven emissions reductions in the short term to ensure that a 2°C future remains viable.

Publication details

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Reference

Please refer to this paper as Better Partnerships: Understanding and increasing the impact of private sector cooperative initiatives (CISL; Ecofys, 2015).

Copies

This full document can be downloaded from CISL's website: www.cisl.cam.ac.uk or Ecofys's website: www.ecofys.com

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Executive Summary

This report provides an overview of five international collaborations involving the private sector, aimed at addressing climate change. At current ambition levels, greenhouse gas emission reductions from all five initiatives could reach 200 MtCO₂e¹ in 2020, while also generating considerable co-benefits. This could increase to 500 MtCO₂e if the initiatives grow. In addition, this assessment leads to an Action Plan for the successful implementation of cooperative initiatives in the private sector.

Potential

This report covers five cooperative initiatives involving business in delivering greenhouse gas (GHG) emissions reduction: the Cement Sustainability Initiative, en.lighten, the Tropical Forest Alliance 2020, WWF Climate Savers and Refrigerants, Naturally! Within their present scope, the potential aggregate emissions reduction from all initiatives in 2020 is considerable; some 200 MtCO₂e. This may be fairly modest in comparison to the 10 Gigatonne (Gt) CO₂e 'gap' under present emission scenarios, but if all members adopt the ambition levels of the leaders or expand membership, reductions may add up to 500 MtCO₂e (see graph on page 2). Moreover, these initiatives deliver other benefits, including innovation and increasing the political salience of challenging issues. The potential impact of this in the long term should not be underestimated.

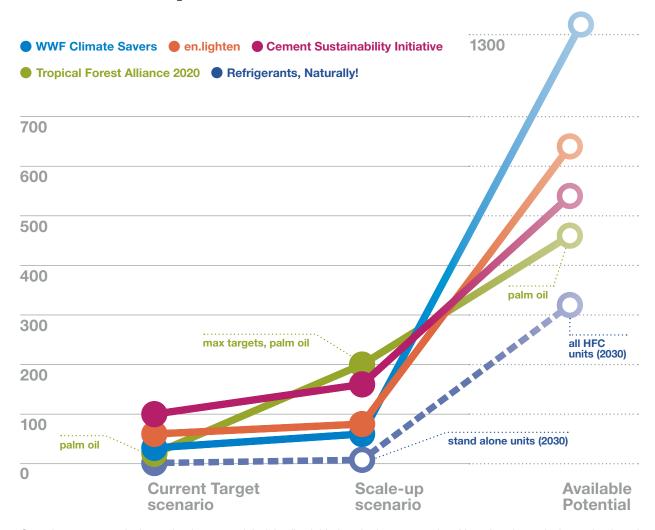
The international scope of these initiatives is key to their potential in achieving reductions of (GHG) emissions that are in addition to existing country targets. Exchanging best practices across borders creates large opportunities, even in countries where climate change policies are weak or missing. This effect is fundamental to the ability of business to contribute to mitigating climate change beyond what current policies can achieve.

When companies work together in these initiatives, they experience many advantages and can achieve greater impact. They share processes to account for their progress, knowledge and best practice. Cooperation also leads to dynamic target setting, in particular when leaders start inspiring each other to increase ambition. Furthermore, competitiveness concerns can be addressed if a large proportion of a sector works together. Finally, if a group of companies reach a critical mass, their influence as buyers can impact an entire supply chain.

There are different drivers for companies to participate in these initiatives. The most common are: being recognised as a leader in sustainability, getting ahead of regulation, cost savings and creating new markets.

¹ CO₂e denotes greenhouse gases with a warming effect equivalent to the specified number of tonnes of carbon dioxide.

Upper range of MtCO₂e mitigated by 2020



Greenhouse gas emission reduction potential of the five initiatives in three scenarios. Note that the emission reductions for Refrigerants, Naturally! are for 2030.

Cooperative Initiative Action Plan

Built on the lessons learned from the five case studies in this report, we suggest a nine-point Action Plan to increase the impact of cooperative climate initiatives in the business sector.

Cooperative initiatives should:

Set clear goals: Targets, whether for emissions reduction, policy impact, technology innovation or other co-benefits, should be upfront and include indicators for success.

Monitor action: Maintain and publically report, where appropriate, good quality data to monitor and support action.

Increase ambition: Establish a process which fosters dynamic and continuous ambition raising and improvement.

Increase membership: A focus on increasing membership requires an explicit strategy to manage the tension between raised ambition and larger membership.

Collaborate across sectors: Collaboration with other initiatives, sharing best practice and achieving shared aims provides mutual benefits.

Communicate: Good communications to support the adoption of best practice.

Stakeholders should support cooperative initiatives by:

- Including cooperative initiatives in climate strategies, recognising how they can support climate goals, as well as delivering other social, environmental and economic benefits.
- Supporting them to increase impact. That includes collaborating to address policy and technology barriers and providing resources and funding to enable the initiatives to reach increased membership.
- Recognising the bottom-up nature of these initiatives and creating open support structures rather than overly bureaucratic institutions.

Introduction

Current government plans for GHG emission reductions are not yet sufficient to deliver on global goals, or to stabilise climate impacts at an acceptable level. Bottom-up initiatives from companies and other non-state actors can contribute to additional emissions reduction and can provide an impetus to increase government ambition.

This report looks in detail at five cooperative initiatives which involve the private sector. It presents an analysis of the initiatives' current and potential future emissions reduction as well as barriers to, and opportunities for, scaling up their impact. The aim is to map out existing initiatives and engage and inform stakeholders, with a view to supporting and increasing the ambitions of these initiatives and highlighting frontrunners. Subsequently, successes can be expanded or replicated.

The need for action

Increased levels of GHG emissions have put the world on a path to significant climate change which could have devastating impacts on the economy and society. If unchanged, current global emissions will lead to an average global warming of 3.5–4.0°C (IPCC 2014), almost double the global average of 2°C that governments have agreed warming should be limited to. The 2014 UNEP Emissions Gap Report projects a gap of around 10 GtCO $_2$ e in 2020, and up to 17 GtCO $_2$ e in 2030, between the current emissions trend and the pathway that would keep us under 2°C.

To bridge the gap, the global economy will need to find a way to keep growing without increasing GHG emissions. In some countries there are already positive signs of a decoupling of emissions from economic growth and an increasing understanding of the benefits of a shift to a clean economy (see for example – the Global Commission on the Economy and Climate, 2014; 2015). There is growing interest in the voluntary and bottom-up activities that leaders across society can engage in to accelerate change, often because of additional economic, environmental and social benefits beyond avoided GHG emissions. These activities can complement policy action, helping to drive up ambition and increase impact.

This is where collaborative action between companies, governments and civil society can play a key role. There are increasing examples of this happening. So-called 'cooperative initiatives', involving governments and non-governmental organisations, are structured partnerships with significant potential to help close this gap left behind by policy (Ecofys, CISL 2014; UNEP 2015).

The case for increased collaboration with the private sector

The potential impact of private sector collaborations is increasingly being recognised by those involved in the global climate change negotiations under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC). The 21st Conference of the Parties to the UNFCCC (COP21) will take place in Paris this year, and

Introduction continued

a new international agreement on climate change is due to be struck. Ahead of COP21, countries are putting forward their Intended Nationally Determined Contributions (INDCs), which describe the post-2020 climate actions they intend to take as part of a new agreement. Many countries have already done so and it is clear that we will need action outside the UNFCCC commitments to increase emissions reduction, both in the short and medium term, if we want to achieve our globally agreed 2°C goal.

There is also a growing awareness that businesses will become key players in the fight against climate change. A recent report by the Global Commission on the Economy and Climate (2015) concludes that 'sustained growth and climate action can, and must, be achieved together'. The report indicates that any future international agreements and successful action on climate change must be built on the bottom-up actions and contributions that international investors, business leaders, communities and governments are bringing to the table. Working in collaboration can help businesses achieve economic growth and make a significant contribution to driving down carbon emissions and managing climate risks.

Of the 183 international cooperative initiatives captured in the Climate Initiatives Platform, at least one in three have private sector participants or members. Increasing the breadth and depth of such engagement will hasten transition to a low carbon economy.² Collaborating internationally can be an effective and efficient method to scale-up action, transform markets, get ahead of regulation and ensure continued competitiveness. This form of collaboration can be defined as 'pre-competitive-collaboration' – where competitors share early stages of research that benefit all (Weber 2004).

Methodology

For the purpose of assessing the potential of business cooperation as well as the main success factors and barriers for achieving real impact, we followed a structured selection process to determine the case study initiatives. We applied different scenarios to analyse potential impact. To understand the drivers of each initiative's success and the barriers and opportunities ahead, we interviewed stakeholders from each initiative.

² The Climate Initiatives Platform includes a comprehensive collection of information on international climate initiatives currently in operation. Initiatives included are those which: contribute to reduction of greenhouse gas emissions; are international in scope or have the potential for significant impact at global scale; and are either dialogues, formal multilateral processes or implementation initiatives. See http://climateinitiativesplatform.org/index.php/Welcome

Selection of initiatives

From the 183 international cooperative initiatives collected in the Climate Initiatives Platform, we selected case study initiatives for in-depth analysis, based on the following criteria:

Long term private sector commitment: Initiatives had to have private sector involvement and be in operation for at least three years to be short-listed. This led to the selection of 44 initiatives spanning 9 sectors.

Leadership, visibility, mitigation: Subsequently, these initiatives were examined to identify the ones with not only mitigation at the centre of their efforts but also a high degree of private sector leadership and prominent presence in the space of non-state climate

action. This left 14 initiatives active in six main sectors.

· Current and ambitious:

Finally, the remaining initiatives were analysed according to the relevance and breadth of their themes, the potential impact and ambitions they were able to deliver, as well as their current activity levels and data availability.

Following these three filtering steps five examples were selected to showcase different types of private sector initiatives and their potential impact. These were:

- The Cement Sustainability Initiative;
- en.lighten;
- The Tropical Forest Alliance 2020;
- WWF Climate Savers; and
- Refrigerants, Naturally!

Three scenarios

To better understand the potential emission reductions that lie within private sector initiatives, we ran three scenarios as part of the impact analysis:

· Current Target scenario

This scenario represents the impact on emissions reduction the initiatives can have if current targets are continued up to 2020. This scenario takes into consideration the different levels of engagement and ambition put forward by the initiative's members.

Scale-up scenario

The scale-up scenario demonstrates the potential impact the initiatives could have with more ambitious approaches, increased business engagement and, in some cases, regulatory support. This would allow all members of the initiative to follow the example of leading members that have set the most ambitious targets or the initiatives to moderately broaden their membership.

Available Potential

The final scenario explores the potential if sector peers were to follow the lead of these ambitious initiatives. This potential should be understood as an indication of emission reductions achievable if an entire sector were to take similar actions – the aim here is to highlight for regulators, analysts and industry leaders the ultimately available potential gains in these areas.

As each initiative investigated here has its own governance and membership structure, these three basic scenarios translate into slightly different approaches, as detailed in the case studies. The full methodology description, input assumptions and limitations to the analysis are available online.³

Stakeholders feedback

Stakeholders, including initiative secretariats, member companies, key governments, climate change experts, and funding organisations, have been actively engaged throughout the research through a series of interviews (15 in total) and workshops. Interviews were conducted with both the secretariat and at least one member company for all five case studies. These helped to determine the major motivations behind initiative set-up and company participation, as well as to identify initiative ambition and key barriers to scaling up impact. Initiative stakeholders were also active participants at workshops.

³ Please refer to Ecofys and the University of Cambridge Institute for Sustainability Leadership websites.



The Cement Sustainability Initiative (CSI) promotes sustainable development in the cement industry, a significant heavy industry sector which accounted for emissions of 2.2 GtCO₂e in 2011 globally (IEA 2014). CSI has a number of priorities, including CO₂ emission reduction, where members are expected to set clear targets for reductions per unit cement produced within their own operations. The estimated impact in 2020 of those members with reported targets is an avoided annual emission of 50-100 MtCO₂e.

Start year	1999
Number of members	25
Number of members with reported emissions target ⁴	11
Expected impact in 2020 of members with reported targets	50-100 MtCO ₂ e/yr
Possible impact in 2020 if all members delivered equivalent ambition ⁵	60-160 MtCO ₂ e/yr
Possible impact in 2020 if Chinese cement sector delivered equivalent ambition	10-400 MtCO ₂ e/yr
Possible impact in 2020 if entire sector delivered equivalent ambition	120-540 MtCO ₂ e/yr

Success factors, motivations, barriers and opportunities to scale

The success of CSI may be attributed to its longevity (operating for 16 years) and the inclusion of a large percentage of the industry (approximately 30% of the world's cement production). Members are required to set up and report on emission reduction targets as part of the initiative. Also, membership includes a considerable number of companies from developing countries, and this global network is underpinned by a standardised measurement, reporting, and verification (MRV) process. This MRV process includes regular and independent auditing of company targets and progress.

The initiative also provides a strong network for sharing knowledge and best practice. Many CSI members actively engage with the initiative at a very senior level, up to and including executive management committees and company CEOs. All these factors (longevity, coverage, targets, MRV standards, senior leader engagement, outreach across borders and knowledge sharing), provide the group with greater credibility and support for achieving their sustainability goals than companies would have if acting alone. This credibility also contributes to the ability to engage with national business associations and governments, in order to influence the development of regional and national standards relevant to their sector.

CSI founder companies made the strategic decision to establish the collaboration following an increased awareness of societal sustainability concerns and reputational risks that could be associated with the sector if they did not take action. Other strong drivers include high energy costs, potential future resource constraints and regulatory measures, and demonstrating the sector's willingness to be proactive regarding the sustainability agenda. There are also large efficiencies to be gained in co-creating and implementing a common set of MRV standards across multiple locations.

CSI has decided to focus on increasing its membership to help scale up its impact. This would allow the initiative to capture a higher percentage of the world's cement production. It would also increase its reach beyond its membership through the creation and implementation of regional roadmaps for the sector.

CSI identifies barriers to scaling up emissions reduction in the cement sector as being primarily around economic and regulatory barriers⁶, a lack of infrastructure, as well as lack of further R&D funding into technological advancements (such as clinker substitution, Carbon Capture and Storage and fuel switching) (IEA; WBCSD, 2009). It is seeking to solve some of these barriers by creating partnerships with other sectors, e.g. as part of the Low Carbon Technology Partnerships initiative.

Recommendation

This report recommends that the initiative consider making a joint commitment to achieve ambitious targets for clinker substitution and alternative fuel use by 2020. CSI could then invite governments to make the same commitments and collaborate directly within a broader platform to achieve the aims. The analysis also clearly demonstrates the opportunity for increased emissions reduction if members are encouraged to set targets that match the ambition of the leaders.

⁴ It should be noted that all members are required to set and report on their targets as part of the initiative. They have 3 years to set up their MRV and target process. The newer members are still in this process – the number with targets should therefore shortly increase.

⁵ Impact of all CSI members setting emission intensity reduction targets at the average level of the CSI members with reported targets.

⁶ An example of such a barrier is where waste regulations or lack of infrastructure hinder the use of waste as an alternative fuel source.



United Nations Environment Programme (UNEP) and companies OSRAM and Philips Lighting, with support from the Global Environment Facility (GEF). The initiative's main aim is to support countries in their transition to energy efficient lighting options. En.lighten directly supports countries participating in the Global Efficient Lighting Partnership Programme, while engaging other countries in setting ambitious lighting strategies, with the goal to phase out inefficient lamps by as soon as 2016. At the time of writing, participating countries are at various stages of drafting and implementing their national lighting strategies.

Start year	2009
Number of participating countries	73
Number of participating countries which have already set legally binding phase out targets before 2020	39
Expected impact in 2020 by participating countries with binding targets	Approx. 60 MtCO ₂ e/yr
Possible impact in 2020 if all participating countries set targets for a ban on sales in 2016	Approx. 80 MtCO ₂ e/yr
Possible impact in 2020 if all developing countries ban the sale of incandescents in 2016	Approx. 340 MtCO ₂ e/yr
Possible impact in 2020 if the world bans the sale of incandescents in 2016	Approx. 640 MtCO ₂ e/yr

Success factors, motivations, barriers and opportunities to scale

The success of the initiative may be attributed to the number of different actors that form part of the initiative, the desire of stakeholders to achieve change, the credibility and reach of its secretariat and the opportunities available for energy savings (motivating governments) and increased market share (motivating global private sector actors). The initiative is a public-private partnership between governments and business, including a small group of core businesses, international agencies, and civil society organisations from over 70 countries, all seeking to facilitate a transformation of the lighting sector. The initiative provides a strong network for policy support and advice, knowledge and best practice sharing, as well as the development of a number of research, development, and innovation centres. Companies engage with the platform in two different ways; at a global level, Philips and OSRAM are the key business participants, while local companies are more actively involved in the transformation process in the national and regional programmes. Working closely with the private sector is a key factor in the initiative's success.

En.lighten has taken a regional approach to the implementation of standards. This allows for significant efficiencies as countries are able to share the costs for innovation and testing centres, as well as recycling and waste schemes to manage disposal of the new products (e.g. lights containing mercury).

There are strong business drivers for major lighting manufacturers such as Philips and OSRAM to participate in the initiative, including increased market share and profit margins from the new technologies involved in the global shift from incandescent lighting to more efficient lighting systems. The companies invest significant resources into the initiative in terms of staff time and providing advice and support to the secretariat and local governments on the ground.

They also reach out to local companies to share their experiences in implementing the new lighting standards in a way that ensures competiveness in a new lighting market. Local companies see strategic value in collaborating with the process to ensure they are players in the future market place, while sharing knowledge and best practices and benefiting from networking opportunities within the initiative.

One of the ways in which en.lighten is seeking to scale up its impact is by widening its reach to include more global business members, particularly from developing countries. It is also widening its scope from residential lighting to include all lighting, as well as partnering with others to expand even further to different appliances. This means the initiative needs to increase and strengthen its engagement with national and sub-national governments. If en.lighten were to expand to include other inefficient lighting systems, such as street lighting, these sub-national and local governments will be key to implementing this in practice.

As its main barriers, the initiative identifies lack of resources (funding) for supporting countries in creating their own testing and innovation facilities, and to support the expansion as described above, as well as the slow pace of necessary policy-making and regulation to support this.

Recommendation

This report recommends that member countries increase their ambition, moving to ban the sale of incandescent lighting as soon as possible. The transformation process could be speeded up by embedding the initiative's knowledge around the development of standards within local industry associations, allowing more ownership and development by local actors, and increasing private sector membership.



Case study 3

Tropical Forest Alliance 2020

The Tropical Forest Alliance 2020 is a public-private partnership that aims to connect, mobilise and support its different partners from the private sector, governments and civil society leaders, in their common goal to reduce the deforestation of tropical forests. Its geographical focus is in South East Asia, Central and West Africa, and relevant regions of South America. The Alliance aims at changing the market dynamics of the key commodities driving deforestation: palm oil, soy, beef, and paper and pulp.

Start year	2012
Number of direct private sector members	16
Number of members with a zero net deforestation target for palm oil	8
Current annual emissions savings of members with targets	Approx. 20 MtCO ₂ e/yr
Expected impact in 2020 if all palm oil handled by members was sourced sustainably	20-200 MtCO ₂ e/yr
Expected impact in 2020 if all global palm oil was sourced sustainably	50-460 MtCO ₂ e/yr

Success factors, motivations, barriers and opportunities to scale

The Tropical Forest Alliance 2020 is a relatively newly formed initiative in the early stages of action. It has good commitment from a varied group of large, proactive companies. As the Alliance is a collaboration between business (through the Consumer Goods Forum, with 400 members), governments and NGOs, there is strong potential for the initiative to have a significant impact. The initiative brings together countries outside of the geographical focus areas who are willing to support efforts as well as tropical countries where deforestation is taking place. Developing countries are motivated to join the initiative because of its emphasis on the economic benefits of sustainable land management practices (such as the potential for increased crop yields).

Private sector actors are motivated to participate in the initiative for a variety of reasons. Many companies joined the initiative because working together ensures they have a greater say in aligning efforts to secure deforestation free supply chains. They also have greater control over purchasing sustainable (and certified) products and remain competitive faced with a customer base which is increasingly sensitive to the deforestation issue. They also increase their credibility and enlarge their influence in societal movements in this area.

The commitment of companies' executive management and CEOs to sustainability goals and the greater deforestation issue was a key factor in the decision of many companies to join the Topical Forest Alliance 2020. The Tropical Forest Alliance 2020 was established in 2012 and progress is only now starting to manifest, after an initial focus on governance, structure, fundraising and increasing secretariat capacity. Re-locating the secretariat to the World Economic Forum, and the infusion of increased international donor support, should enable the Alliance to scale up its impact.

The Tropical Forest Alliance 2020 seeks to scale up its impact by increasing membership to more companies from more countries. The Alliance seeks to involve companies from key regions with significant forest resources (South East Asia, relevant regions of South America and Central and West Africa) to help ensure there is effective international and local cooperation on the ground where it matters most.

According to some stakeholders, a barrier to scaling up impact significantly, at least in the short term, could be the different drivers and different levels of ambition within the initiative. Developing country companies may be more focused on achieving additional co-benefits (e.g. increased economic benefits associated with a more sustainable product) than large developed country companies (who may be more focused on supply chain management, demonstrating emission reductions and their company image). The high 'net deforestation' targets of existing member companies are a potential barrier to those wishing to join the initiative, who may believe they are unable to match this level of ambition. Measuring impact against the ambitious net deforestation goal has also been identified as a potential barrier, with companies trying to find a balance between the need to find a mechanism that tackles the issue at hand (i.e. deforestation) but also takes other cobenefits into account (e.g. social aspects). All of this is further hindered by limited available data and limited ability to source. The report notes that corporate engagement and ambition needs to be supported by a sound policy and regulatory environment, particularly in countries where deforestation takes place. Focusing solely on certification, should companies choose to do so, may also be sub-optimal, especially when certification standards do not provide the necessary traceability and guarantee of emission reduction.

Recommendations

This report recommends that all Alliance member companies match the highest ambition level and set targets to achieve zero net deforestation from palm oil supply chains by 2020. A parallel process of target setting also needs to be achieved in other commodity sectors. Traceability clearly needs to be ensured and sustainability standards used need to explicitly take carbon into account.

WWF Climate Savers

Through its Climate Savers Programme, the World Wide Fund for Nature (WWF) engages with the private sector on climate and energy issues with the aim of encouraging businesses to become low-carbon leaders and agents of change in their fields. It is built on 2 pillars of leadership: WWF Climate Savers is built on two leadership pillars: reduction in operational carbon footprint, and magnifiers: companies acting as agents of change. Founded in 1999, membership currently includes 28 cross-sectoral members.

Start year	2000
Number of members	28
Number of members with emissions target	28
Expected impact in 2020 of members with targets	10-32 MtCO ₂ e/yr
Expected impact in 2020 if membership doubles	16-60 MtCO ₂ e/yr
Possible impact in 2020 if industry peers follow suit	1,000-1,300 MtCO ₂ e/yr

Success factors, motivations, barriers and opportunities to scale

The success of WWF Climate Savers can be attributed to its ambitious objectives and criteria for membership. Its members comprise 28 large, often global, companies from a variety of different sectors. This cross-sectoral membership allows for greater knowledge sharing across different issues. The initiative requires member companies to include not only their own operational emissions, but also other indirect emissions resulting from outsourced activities or downstream product in their targets.

In spring 2015, the programme announced that members would set emissions targets for the next commitment period to be compatible with holding global temperature increases to below 2°C. With the introduction of the Science-Based Targets initiative, WWF Climate Savers will also encourage companies to start looking beyond 2020, with commitment periods of at least 5 years.

Private sector actors are motivated to participate in the initiative for a variety of reasons. Because of the stringent entry criteria, participation allows companies to implement and validate their climate goals, and gain credibility through the association with, and endorsement of, WWF. The initiative helps companies to set, implement, and achieve targets through the direct support of WWF and through the sharing of knowledge and best-practice within the network. For some member companies, leadership aspirations stem from strong interest in the company's emissions reduction goals from the Executive Management Committee and company's CEO.

WWF Climate Savers seek to increase membership and have members sign up to Science Based Targets. The approach for increasing impact is about growing the membership through a targeted set of companies, based on their size and visibility, as opposed to working with as many companies as possible. The strategy is very much based on the influence these companies can have on others in their sector and elsewhere, based on the leadership actions they are already taking.

The process companies undergo to set their targets, with guidance from WWF, is a motivator for companies to join, but potentially also makes it difficult to scale up significantly in a short period of time as it is a time and resource intensive process. The process becomes more efficient over time but due to the cross-sectoral and international nature of the members, efficiency gains are limited.

Recommendation

This report calls on senior executives of WWF Climate Savers member companies to do more to promote the initiative and reach out to their peers to increase membership. Increasing company ownership of the initiative (for example through increasing senior business decision-making on the future direction of the initiative) could support this. Another option would be for WWF to partner with influential civil society organisations in different developing countries to help increase local engagement.



Refrigerants, Naturally! aims to replace F-gas based refrigerants (potent greenhouse gases) used in point-of-sale refrigeration with natural refrigerants such as hydrocarbons (HCs) and CO₂. This initiative has been in operation for over a decade, and will have an impact by 2030 of 0.2–1.4 MtCO₂e/yr in annual avoided emissions. This relatively small number is due to the fact that emissions mostly occur at the equipment's end of life, 8–14 years after purchase. Therefore, even if the initiative was extended to the entire refrigeration sector utilising HFCs in 2015, the avoided emissions would only occur after 2020. However, under the described scenario, abatement would be 240–320 MtCO₂e/yr by 2030.

Start year	2004
Number of members	4
Expected impact in 2020	0.0-0.7 MtCO ₂ e/yr
Expected impact in 2030	0.2-1.4 MtCO ₂ e/yr
Possible impact in 2030 if entire stand-alone refrigeration sector follows suit	0.9-7.9 MtCO ₂ e/yr
Possible impact in 2030 if all refrigeration units using HFCs follows suit	240-320 MtCO ₂ e/yr

Success factors, motivations, barriers and opportunities to scale

Refrigerants Naturally! is a small group of major players in the food and drink refrigeration sector who collectively cover a notable proportion of the global market in stand-alone point-of-sale refrigeration units. These companies began to view the current F-gas based cooling systems as out-dated and harmful and so have moved to new cooling units using natural gases. The initiative offers its member companies the opportunity to work together to pilot and promote innovation in a niche focus area (Propane phase-in in stand-alone point-of-sale refrigeration units).

In its current form, the initiative will achieve very modest emissions reductions by 2030. Due to the very specific focus of the initiative and the nature of the emissions' occurrence, the projected impact is currently small but there is potential for considerable scaling in this sector. There are also clear examples of where the initiative's activities have had a direct influence on transforming the market for natural refrigerants, for example in the US, where use of natural refrigerants was long forbidden.

Members have been primarily motivated to act in this area to maintain their sustainability leadership image, as well as getting ahead of potential regulation. Stable membership in the initiative allows for a strong network for knowledge and best practice sharing, particularly on technical aspects of switching to natural cooling systems. This knowledge is also available to non-member companies. The initiative helps increase communication of the benefits of natural refrigerants to help achieve scale by serving as a united front for the companies' aims.

The initiative now enjoys global reach, thanks to its members' multinational operations. It has worked well with a small membership. However, there may be more opportunities to expand the initiative's focus to include development of a sectoral roadmap for the whole stand-alone refrigeration sector. Engagement could also be increased to include similar stakeholders such as brewery companies (who also use stand-alone refrigeration units). The high levels of ambition within the initiative may be seen as a barrier for new companies, believing they are unable to set similar targets (e.g. 100% replacement of F-gas coolers). Primary bottlenecks to increasing the use of stand-alone natural refrigeration units include the need for greater and more rapid availability of the new technologies as well as maintenance and service infrastructure.

Recommendations

This report recommends that governments phase out refrigeration HFCs completely by 2030. To achieve maximum impact and emissions reductions in this sector, a similar technology substitution to that carried out by Refrigerants Naturally! would need to take place for all refrigeration units. To facilitate increased action, more communication is needed by the initiative with governments and decisions makers, along value chains, and particularly with the end users of these units (i.e. the retailers). Improved communication will raise greater awareness for the benefits of natural refrigerants (such as greater energy efficiency).

Conclusions and recommendations

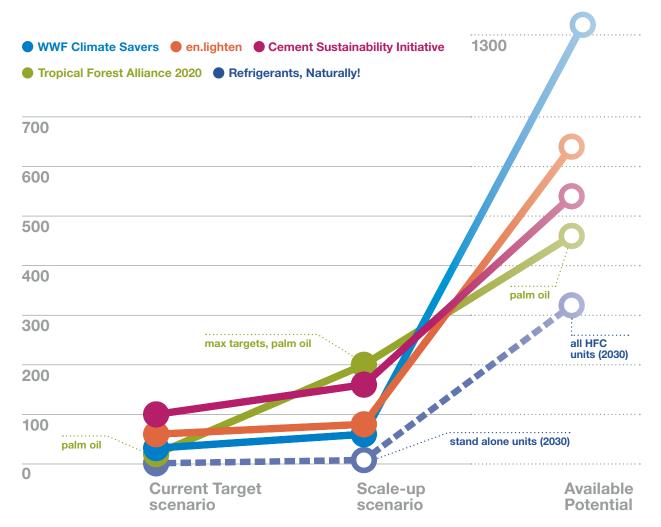
Assessment of these five global climate initiatives provides some important conclusions regarding potential emissions reduction by 2020, co-benefits, and barriers to, and opportunities for, increased scale. Based on the assessment, we suggest the Action Plan for cooperative initiatives, governments and wider stakeholders.

Potential

This report clearly demonstrates the existing potential available for increased emissions reduction in the short to medium terms through increased collaboration, ambition, private sector leadership and regulatory support. Within their present scope, the potential aggregate emission reductions from all initiatives in 2020 is considerable; up to 200 MtCO_oe. This may be fairly modest in comparison to the 10 GtCO e 'gap' under present emission scenarios, but if all members adopt the ambition levels of the leaders or expand membership, reductions may add up to 500 MtCO₂e (see graph on page 17). Moreover, these initiatives deliver other benefits, including innovation and increasing the political salience of challenging issues. The potential impact of this in the long term should not be underestimated.

The GHG emission reduction potential of each of the five initiatives is assessed for three different scenarios of development (see graph on page 17). In the Current Target scenario emissions reductions add up to 200 MtCO_oe but could be as high as 500 MtCO₂e, as presented in the Scaleup scenario. Additionally, our analysis suggests that there are significant further reductions available if there were to be a proliferation of these new business norms in the relevant sectors, leadership emerging in adjacent sectors, better partnerships forged between sectors, as well as the introduction of strongly supportive regulation. The Available Potential scenario (see page 5) represents this increase – it is much higher, but requires a dramatic and systemic change, virtually instantly, and is hence presented as a reference rather than a guide to action. As explained in the case study, the largest emissions reduction in the Refrigerants Naturally! initiative will occur only after 2020.

Upper range of MtCO₂e mitigated by 2020



Greenhouse gas emission reduction potential of the five initiatives in three scenarios. Note that the emission reductions for Refrigerants, Naturally! are for 2030.

Different approaches

The membership, sector coverage, governance structure and approaches vary widely by initiative. For example, the Cement Sustainable Initiative and Refrigerants Naturally! are fully private sector led initiatives, whereas WWF Climate Savers is an NGO-private sector partnership, and en.lighten and the Tropical Forest Alliance 2020 are public-private partnerships with governments and business working closely together. En.lighten stands out from the other initiatives in terms of its approach: governments are members with the main tool for implementation being via regulation and policy. There is a strong sectoral focus in four of the initiatives. In this regard WWF Climate Savers stands out as an initiative with crosssectoral membership.

Motivations

It is helpful to understand why businesses are increasingly taking part in such initiatives, noting that companies have different reasons for doing so. A shared motivation for all of the companies is to show leadership in sustainability. However, some initiatives are more explicit on particular drivers for collaboration, such as to avoid a negative perception of business cost savings, or to seize a market opportunity.

Conclusions and recommendations continued

Success factors, barriers and opportunities to scale

To varying degrees, all the initiatives highlighted senior level buy-in as key to the initiatives' success. Being international in scope, having clear goals and the opportunity to share knowledge and best practice are also noted by interviewees as factors for initiative success. For some, the participation or support of different types of actors is seen as pivotal to their success.

Essential to the success of each of the initiatives is their ability to communicate and implement best practice across their membership base. This usually requires good data sharing, agreed methodologies and strong communications fora, facilitated by a credible and well-resourced secretariat.

To increase impact will require overcoming a number of barriers and pushing for better, more ambitious partnerships. To deliver this, strategies will need to be tailored to each of the initiatives' decision-making processes. Despite their differences, some of the initiatives also have barriers in common.

Scaling up ambition of an initiative, in terms of emission reductions, will ultimately require not only bringing all companies up to the standard of the best, but also raising the level of ambition of the leaders and bringing more companies on board. The latter factor may be the most significant in many cases, but we have identified a tension between increased, or even maintained ambition, and a broader participation. Not all members in an initiative have the same capacity to set and meet targets. The most active and ambitious companies within the five initiatives investigated here are usually large companies with a high commitment to action and significant financial. staff and technological capacity. Therefore, the initiatives that require members to apply stringent targets (e.g. WWF Climate Savers and the Tropical Forestry Alliance 2020) may experience the strongest challenges in expanding membership, potentially limiting their ability to rapidly scale to a critical mass.

Other common barriers are more general, like challenges in new technology development and deployment, and ensuring an effective regulatory framework that supports the initiatives' actions. These shared barriers indicate how important it is that policy makers and other key stakeholders identify the benefits of these initiatives and work constructively with them.

The link with climate policies

Cooperative initiatives deliver emissions reduction, deploy new technologies with economic and environmental benefits, and help shape policy development. They have an important positive role to play in addressing climate change and delivering a new, low-carbon economy. National policy makers can benefit from these initiatives, using them to support the implementation of climate goals and facilitate the regulatory process with data and know-how. Likewise, initiatives can profit from supportive climate policies and regulation.

Most significantly, the international scope of these initiatives is a key part of their potential in helping to close the emissions gap. The initiatives facilitate work across borders, create common standards and embed global best practices where policies in these areas are still missing. This is fundamental to their ability to help closing the emissions gap left behind by policy. This means that they have the potential to not only speed up implementation or increase policy ambition in some places, but that they are actually able to create additional climate gains in countries without these policies.

The way forward

COP21, to be held in Paris in December 2015, could be an opportunity to build momentum behind cooperative initiatives and ensure they are recognised by policy makers as a valuable route to support climate action. Cooperative initiatives should ensure they take the stage in Paris to showcase the contribution they can make and identify the support they need. Governments and other stakeholders should mobilise to encourage and support such initiatives and build on them in raising ambitions and increasing momentum to reduce GHG emissions. This means meeting them where they are and building on the foundation of support and momentum that exists in private sector cooperative initiatives globally.

This report shows the considerable potential that better partnerships have for achieving a prosperous low carbon future.

Cooperative Initiative Action Plan

Built on the lessons learned from the five case studies in this report, we suggest a nine-point Action Plan to increase the impact of cooperative climate initiatives in the business sector.

Cooperative initiatives should:

Set clear goals: Targets, whether for emissions reduction, policy impact, technology innovation or other co-benefits, should be upfront and include indicators for success.

Monitor action: Maintain and publically report, where appropriate, good quality data to monitor and support action.

Increase ambition: Establish a process which fosters dynamic and continuous ambition raising and improvement.

Increase membership: A focus on increasing membership requires an explicit strategy to manage the tension between raised ambition and larger membership.

Collaborate across sectors: Collaboration with other initiatives, sharing best practice and achieving shared aims provides mutual benefits.

Communicate: Good communications to support the adoption of best practice.

Stakeholders should support cooperative initiatives by:

- Including cooperative initiatives in climate strategies, recognising how they can support climate goals, as well as delivering other social, environmental and economic benefits.
- Supporting them to increase impact. That includes collaborating to address policy and technology barriers and providing resources and funding to enable the initiatives to reach increased membership.
- Recognising the bottom-up nature of these initiatives and creating open support structures rather than overly bureaucratic institutions.

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