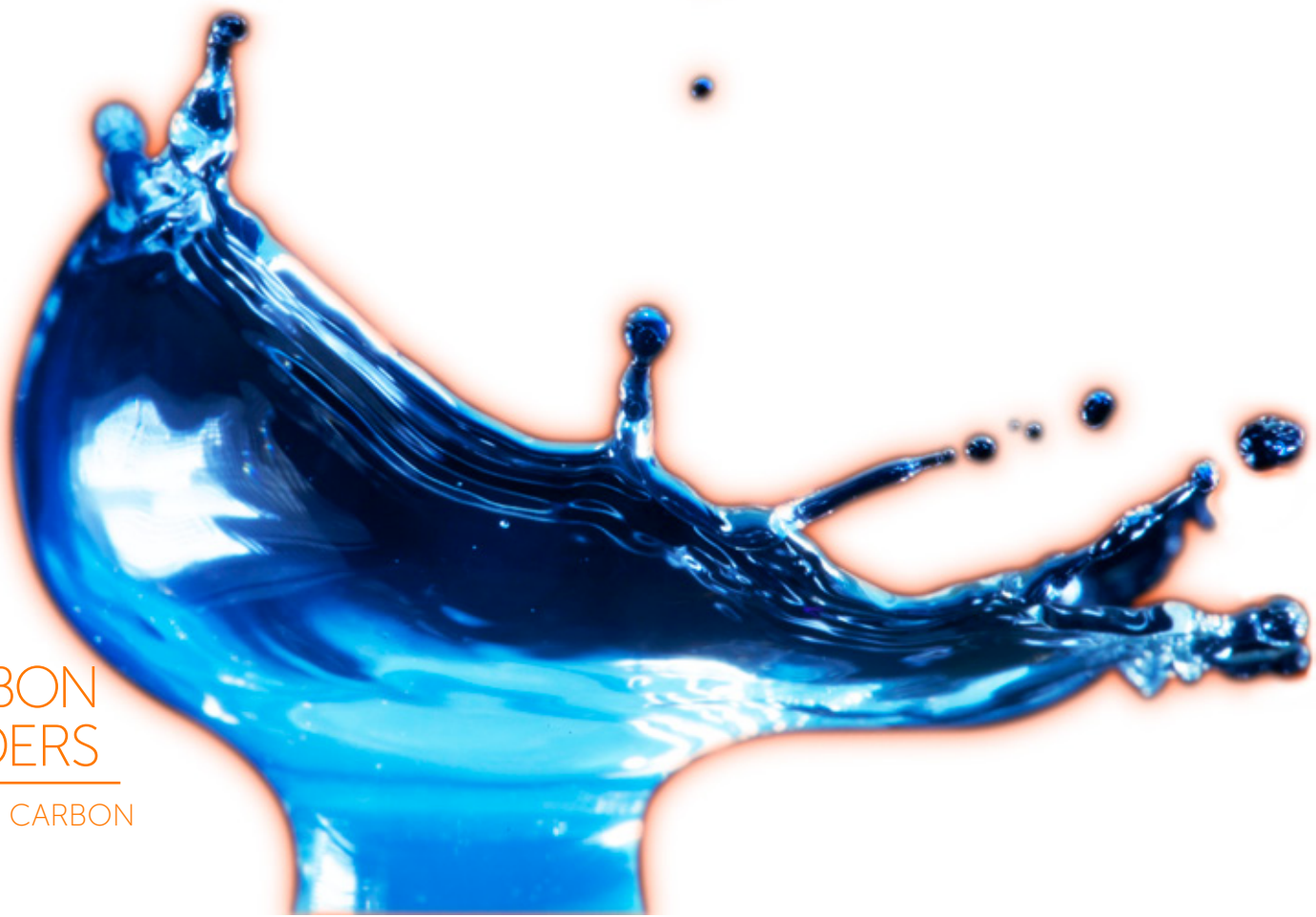


21ST CENTURY CLUSTERS

Transformative solutions for a low-carbon world without poverty

LOW
CARBON
LEADERS

BEYOND CARBON



Only a small fraction of business leaders have so far taken the sustainability agenda seriously. It is time to change course. Incremental improvements in existing systems are insufficient measures in the battle against climate change and poverty. Small isolated changes seldom contribute to the creation of solutions that nine billion people can use, nor will this approach deliver carbon-free solutions and poverty reduction as rapidly as necessary.

Approaching Rio+20, the key challenge is to create a fundamentally different approach in order to drive the necessary accelerated transition to a new economic model that can stop the climate crisis and create global wellbeing for 9 billion people. We have to focus on how to meet

the needs we have in a sustainable way rather than simply trying to eliminate problems in the current system. We have to look for integrated solutions that address climate change and poverty at the same time. The project will develop concrete proposals and strategies, based on key concepts that can deliver a sustainable low-carbon world without poverty.

For 40 years, the dominating sustainable development approach has been problem-oriented. Now is the time to create a framework for transformative solutions, where cross-issue and cross-sector innovative collaboration approaches are used to create 21st century clusters that deliver 21st century solutions.

Low-Carbon Leaders Project 2.0 — Beyond Carbon

Phase two of the Low Carbon Leaders project, Beyond Carbon, encourages the creation of clusters that deliver solutions to the most pressing needs in society: food, mobility/communication, water, health and temperature/light/shelter. The project focuses on how such clusters can be created, how the uptake of transformative solutions can be accelerated and how the ongoing rapid urbanization can be used as a driver for such solutions.

The project will seek government and stakeholder support for an accelerated uptake of solutions, develop a database that will help entrepreneurs estimate the potential of their solutions, help companies and policy makers identify transformative solutions areas, and serve mobile applications.

For more information, please email:
21stCenturyClusters@transformative-solutions.net

Transformative solution clusters Groups of companies that deliver key services.

Objectives:

1. Create a model for cluster collaborations that help address climate change and poverty simultaneously by providing services in innovative ways.
2. Identify and encourage policy frameworks/initiatives that can:
 - Accelerate uptake of transformative solutions and
 - Support transformative cluster collaboration.

Deliverables:

1. In-depth work with at least one leadership cluster that delivers solutions in areas that can help reduce CO2/ GHG emissions by one Gigaton or more, and reduce poverty for 100 million people or more. Case studies for two other clusters and outlines for another two will ensure both depth and breadth.
2. Policy suggestions and best practice based on public-private dialogues for the clusters.
3. Demonstrate how companies can have a measurable positive impact in society (not just reduce their own negative impact).

Clusters for Transformative Solutions Cross sectorial and stakeholder collaboration

The in-depth work and case studies will be selected from areas such as:

Food

Low-carbon food from supplier in solar intensive location, moved by smart transportation, provided to customers in innovative ways.

Mobility/ Communication

Integrated mobility/communication solution provided by an ICT company in collaboration with a vehicle provider and a city planner.

Temperature + Light + Shelter

Net-producing buildings provided by solar PV provider together with architects and smart-control company

Water

Inexpensive solutions that allow free water for the poor and efficient irrigation solutions.

Health

Smart solutions that allow people to track their vital health signs and provide basic medicine to all.

Open source solution database Approaching the world from what we want

Creating the world's first service-based database to support innovative transformative solutions.

Objectives:

1. Allow entrepreneurs and companies to estimate the CO2 reduction potential of their solutions.
2. Allow policy makers, companies, and entrepreneurs to identify gaps where solutions are needed.
3. Allow stakeholders to identify synergies between different kinds of solutions.
4. Allow stakeholders to develop graphic interfaces (including augmented reality solutions) that encourage innovation and accelerated uptake of transformative low-carbon solutions.

Deliverables:

1. Structure for the world's first carbon database based on services (done for a limited number of areas in a limited number of places)
2. A graphic interface that helps deliver on the first three objectives.
3. An augmented reality (AR) tool demonstrating the potential of the database.

TRANSFORMATIVE SOLUTIONS

Solutions that allow countries to leapfrog past high-emitting ways of providing a service. Transformative solutions are solutions that allow nine billion people to live a good life. Transformative low-carbon solutions often provide GHG reductions of 80% or more, and they depend on an underlying energy-efficient infrastructure.

The solutions can turn problems into opportunities: buildings can be net producers of electricity; transport systems can generate more electricity than they use; food systems that over the lifecycle work as a carbon sink; and they must help people out of poverty.

SECTOR/SERVICE MATRIX

A matrix that promotes Transformative Solution Clusters to allow companies to work together and deliver solutions that society needs, not only work on reducing their own impact.

21st CENTURY INFRASTRUCTURE

An underlying infrastructure that allows for transformative solutions, for instance ICT solutions that support teleworking instead of physical commuting.
Total emission/impact approach

TOTAL EMISSION/IMPACT APPROACH

Enable companies to become Net Positive, when they contribute solutions society needs. Companies can become Climate Positive, i.e., help reduce more emissions in society than they themselves emit.

MOVING THE SUN

Evaluating production and consumption systems based on the energy the sun provides and a full LCA to assess what the most sustainable way to provide nutrition is.

Image on cover: High-speed water photo showing how waves are spread when a cluster of water molecules come together. On this side: traces after an impact



Expected outcome by Rio+20

The outcome below could be a result of the formal outcome at Rio+20, or an agreement among a smaller group of stakeholders.

1. A sector/service matrix is recommended as an overall framework when governments approach companies.
2. Companies and entrepreneurs with solutions that the world needs to reach agreed targets are recognized as solution providers.
3. The need for transformative solutions - that provide services in totally new ways and can be used by 9 billion people - is recognized and given priority.
4. The need for standards for calculating and reporting positive contributions from companies is recognized and a process to develop such standards is called for.
5. A solution database is launched that will help a new generation of entrepreneurs to identify needs, calculate their contribution, and initiate solution clusters.
6. A limited number of solution clusters are recognized and will be asked to report back within a year.

Results and engagement will take place at many different events such as:

- May 17: Caring for Climate Signatories Annual Meeting/Denmark
- September 14-15: Union for Global Sustainability/ Brazil
- 3rd week of September: UN Private Sector Forum/ US
- 12-14 September: WEF Annual Meeting of the New Champions/ China
- December: COP17 in Durban/ South Africa
- Early 2012: CII Partnership summit/India

The final deliverables and launch of new initiatives will happen on the occasion of a special UN Global Compact event at Rio+20 in Brazil.

The Low-Carbon Leaders Project is developed under the umbrella of Caring for Climate Initiative.

About UN Global Compact Caring for Climate

Caring for Climate is the UN Global Compact's leadership initiative formed in July 2007; the platform provides a framework for business leaders to advance practical solutions and help shape public policy. CEOs who support the initiative are prepared to set goals, develop and expand strategies and practices, and publicly disclose emissions as part of their existing Communication on Progress commitment within the UN Global Compact framework. Caring for Climate is endorsed by nearly 400 companies from 65 countries.

For more information including on how to endorse the initiative, please visit the UN Global Compact website at: www.unglobalcompact.org/Issues/Environment/Climate_Change/

