

of Intended Nationally Determined Contributions (INDCs) as well as to guarantee the environmental integrity of the consequent investments;

- a framework securing *the transparency of voluntary commitments* by Parties to the UNFCCC, and by *clubs of countries*, along with non-state actors, private sector and cities to advance low carbon initiatives;
- *a share of the proceeds of these initiatives as a contribution to the Green Climate Fund (GCF)* in order to secure multilateral assistance and the funding of adaptation policies.

Climate finance will *facilitate the deployment of carbon pricing mechanisms*. Lowering investment risks through the use of supportive regulatory frameworks will increase the volume of low-carbon investments at any given carbon price. These regulatory frameworks will allow sufficient time for robust implementation, without postponing the required amount of low-carbon investments, for deploying the compensatory transfers, and the accompanying measures that are needed to increase carbon prices to the required level. It will also enhance the *efficacy of non-price policies* (emission standards, norms, public works) by securing consistency with the agreed social value of carbon reduction and strengthening the confidence of investors.

05 | Conclusion

The Paris agreement is critical. It must set the stage for myriad activities on the ground to mobilize not only the ‘climate concerned’ but also the ‘climate agnostics,’ using the low-carbon transition to better achieve sustainable development goals as well as to respond to short-term economic challenges. This mobilization demands initiatives beyond the UNFCCC, reforming other domains of global governance (finance, trade) and launching clubs of ‘pioneers’ committed to low-carbon transformations in countries, regions and cities.

These initiatives must start directly after the Paris COP. They can do so only if the Paris Agreement establishes a global regime that provides a high level of political legitimacy. A consistent set of rules, derived from the over-arching principles presented in this declaration, is needed to prevent fragmentation, hedge against opportunism and secure consistency with universal objectives. These are the conditions for *launching a virtuous circle that overcomes the economic concerns and vested interests that have, thus far, prevented humanity from responding adequately to the threats arising from human-induced climate change.*

The Paris Agreement will thus help unleash an investment wave that is targeted to low-carbon development and poverty eradication that will respond to short-term economic challenges while supporting the societal changes necessary to build our “new common future”.

The **International Research Network for Low Carbon Societies (LCS-RNet)** circulated a position statement after its seventh annual meeting (Paris, June 2015) in the context of the upcoming COP21. The objective was to demonstrate the possibility of scientists of various disciplines, sharing diverse cultures and coming from countries at different development stages, to express common views about the conditions for triggering climate action in the current economic context.

The position statement is downloadable from the following website:

- English** >> http://lcs-rnet.org/statement/LCS-RNet_Statement_en
- French** >> http://lcs-rnet.org/statement/LCS-RNet_Statement_fr
- Spanish** >> http://lcs-rnet.org/statement/LCS-RNet_Statement_sp
- Arabic** >> http://lcs-rnet.org/statement/LCS-RNet_Statement_ar
- Japanese** >> http://lcs-rnet.org/statement/LCS-RNet_Statement_jp

As of October 2015, the position statement was signed by 217 experts and scientists amongst 74 authors, chairs and co-chairs of the IPCC WGIII, top levels development economists and five former ministers. Even more importantly the signatories come from 48 countries covering all world regions.

- List of signatories:**
http://lcs-rnet.org/statement/LCS-RNet_Statement_List_of_signatories
- Number of signatures by country:**
http://lcs-rnet.org/statement/LCS-RNet_Statement_Number_of_signatories_by_country

About LCS-RNet

For long-term climate stabilization, it is vital for societies to break away from their current, highly energy-dependent state. All countries are now working on developing long-term strategies towards the creation of a new framework after 2020. Japan proposed the formation of a researchers’ community, composed of researchers who are deeply and directly engaged in the policymaking process. This is the International Research Network for Low Carbon Societies (LCS-RNet).

Researchers in this network give their support to scientific policymaking by being deeply engaged in low-carbon, green growth policymaking in their respective countries. The network also includes policymakers, practitioners and other like-minded stakeholders who all work together, conducting in-depth discussions on crucial issues for creating low-carbon societies. In this way, knowledge is shared and reflected into policy.

For further details, please contact

LCS-RNet Secretariat

c/o Institute for Global Environmental Strategies (IGES)
2108-11, Kamiyamaguchi, Hayama, Kanagawa, 240-0115, Japan
Email: lcs-rnet@iges.or.jp
Fax: +81 (0)46 855 3809
Web: <http://lcs-rnet.org>

COP21 – A moment of truth for climate and sustainable development

Time is running out to act on climate change, poverty eradication and sustainable development. These challenges cannot be met independently of each other. The task of COP21 is to send strong policy signals that determined climate action is needed and will not harm the economy. In fact, these actions will trigger multiple employment, health and human development benefits by aligning strengthened short-term economic growth with long-term sustainable development goals.

It is challenging but possible to trigger the transformation toward low carbon futures and to increase the affordability of advanced technologies despite the current pressures on public budgets. The world is awash in liquidity. What is needed is to redirect the savings of households, pension funds, insurance schemes, and sovereign wealth funds towards long-term and low-carbon investments.

Sound regulatory frameworks and innovative financial mechanisms must be established to reduce the risks attached to potentially profitable low-carbon projects that are blocked by a combination of high upfront costs and an uncertain environment, so as to attract private savings and institutional investors.

COP 21 can provide critical policy hooks for step changes in economical and financial intermediation based on public guarantees for low carbon investments; an agreed social value of carbon mitigation activities could be incorporated into diverse low-carbon financial initiatives supporting Intended Nationally Determined Contributions (INDCs); strong and enforceable requirements for Measuring, Reporting and Verification (MRV) can ensure the environmental integrity and sustainability of the resulting investments. Such a framework can secure the transparency of voluntary commitments by countries, clubs of countries and non-state actors.

If it can achieve these goals, the Paris Agreement can unleash a wave of investments into low-carbon development that responds to short-term economic and social challenges while supporting the fundamental changes that will be needed to build our new common future.

01 | A sense of urgency

Time is running out to act on climate change. This has been repeated many times since the UN Conference on Environment and Development was held in Rio de Janeiro in 1992, but world greenhouse gas emissions have nonetheless steadily increased since then. The remaining carbon emissions budget that will sustain a reasonable likelihood of stabilizing the global temperature increase below 2°C will be exhausted in a few decades, if current trends continue.

Time is pressing for poverty eradication, income security, achieving universal access to sustainable energy, food, water, transportation and housing services, and improving public health and education. Only by addressing these urgent challenges, can we lower pressure on resources, slow the pace of forced migration (accelerated by climate change) and ensure *world security* over the century.

These challenges cannot be met independently of each other. Climate stabilization is only possible with the full participation of developing countries, which implies a framework that recognizes the past responsibilities of industrialized countries. Without rapid and ambitious climate mitigation, human aspirations and development goals will be thwarted by climate change. The task of COP 21 is thus to fulfill the Cancun agreement (COP16) to facilitate *‘building a low-carbon society that ... ensures continued improvement in human wellbeing (...) growth and “equitable access to sustainable development”’*.

As we are engineers, economists and social scientists, sharing diverse cultures and coming from countries facing very different challenges, we are *conscious of concerns about the timeliness of large investments in climate action* in a world facing unemployment, social unrest, debt and financial instability. We assert that, sound climate action will not harm the economy but in fact trigger multiple employment, health, security and development benefits, *aligning strengthened short term growth with long term sustainable development goals*.

02 | Low carbon transformation and access to sustainable development

There is *no cornucopia of cheap and environmentally benign alternatives to fossil energy*. Demand-side responses are needed to extend the timespan for deploying these alternatives. This requires transformations in commercial energy systems and also in buildings, transportation, industry, and agriculture in order to enhance energy efficiency, reduce the demand for energy services, and promote cradle-to-grave management of production processes.

Energy, transportation, and building infrastructures are critical for low-carbon futures and for inclusive development: Re-design of urban

and transport infrastructures, exploitation of local renewable energies, quality of urban development, efficacy of market coordination and of institutional reforms, provision of basic needs, lower vulnerability to climatic damages and to the volatility of fossil fuels prices. **A major challenge is to increase these investments and to redirect them in a climate friendly and resilient way.**

To meet this joint challenge, climate policy tools must be aligned with policies adopted for objectives other than climate mitigation: regulations to build electricity grids supporting a higher level of intermittent renewable energy will remove barriers to more decentralized electricity production (including integration between heat and electricity systems, higher quality rural electrification); smart urban planning will bring major health co-benefits through reduced local air pollution and will contribute to social inclusion; reforms of real estate markets to slowdown urban sprawl will make speculative investments less attractive; promoting material efficiency will reduce waste generation; the conservation of ecosystem services threatened by climate changes will contribute to hedging against deforestation and abandonment of traditional agricultural lands.

A credible climate regime is needed to secure the mutual reinforcement of Intended Nationally Determined Contributions (INDCs) and Sustainable Development Goals (SDGs): consistency of national public investments, de-fragmentation of the Overseas Development Assistance, and alignment of donors to universal objectives. All of these things, taken together, can lead to the mobilization of subnational and non-central state actors including corporates, cities and rural communities. The Paris Agreement must offer a *convincing perspective on the gains of cooperation, thereby to create a virtuous circle whereby more ambitious INDCs will be adopted as they contribute to SDGs*. This virtuous circle is the only way of *bridging the emissions gap* between current country pledges and the 2°C objective.

03 | Implementing the Principle of Common But Differentiated Responsibilities

Implementing the CBDR principle has proven challenging in adversarial negotiations on both the mitigation commitments of countries and on dividing the remaining global carbon emissions budget. Securing real rights of access to enhanced finance, technology and development opportunities for developing countries is the only way of implementing of the CBDR. This is needed to guide a cooperative process between countries with different historical responsibility for climate change and who bring differing levels of technical and financial capacity to enable the transition to low-carbon development.

The task of developed countries is to *decarbonize their existing capital stock*, to change consumption patterns, to decrease energy consumption and to *transform the legacy of carbon-intensive energy systems*. The task of developing countries that are currently building much of their infrastructures is to avoid being locked into a high-carbon development pathway.

Commitments under the CBDR principle should thus be geared towards maximizing development opportunities and the obligations for cooperative conduct. The responsibility of developed countries is to propose a framework facilitating *developing countries to implement and reinforce their INDCs* through *access to:*

- *climate finance*, starting from the upgrading of the Green Climate Fund, so as to de-risk future investment and enhance access to capital;
- *knowledge networks* and communication tools to share lessons and experiences, including about technological and institutional innovation; and
- *high-level academic education*, international scientific programs and R&D cooperation.

04 | Triggering the action, in a challenging financial context: the role of COP 21

Accelerating the transformation toward low-carbon futures despite the current pressures on public budgets is challenging but possible. The world is awash in liquidity and there is no lack of savings. One ‘fault line’ of the world economy is rather the long-term investment shortfalls and the preference of financial intermediaries for liquid assets. **A massive redirection of savings towards low-carbon infrastructure and technologies** entails inevitable trade-offs but **will reduce this fault line and unleash a strong positive ripple effect across multiple sectors**. It will benefit both the developed and developing countries. Success cannot be achieved without the mobilization of pension funds, insurance schemes, sovereign funds and households bank deposits which fund a major part of the global economy.

Strong regulatory frameworks and Innovative financial mechanisms can be set up urgently to a) reduce the risks attached to low-carbon projects that are close to the break-even point but blocked by high upfront costs; and b) attract private savings and institutional investors by valuing low carbon assets. The required reforms (e.g., to Basel III regulations, refinancing criteria, public guarantees on credit lines) are beyond the scope of the UNFCCC. They will result from initiatives by ‘clubs of pioneers’ but **COP 21 can provide four critical hooks for stimulating the step changes that are necessary** in financial intermediation:

- Recognize the importance of *an agreed economical and social value of carbon mitigation activities* that must be incorporated into the public policies that underpin the INDCs as well as into the diverse financial initiatives required to implement them, thus avoiding their fragmentation and increasing the efficiency of mitigative actions,
- a strong and credible regime for **Monitoring, Reporting and Verification (MRV)** under the authority of the UNFCCC both to ensure the adequacy of support and efficient use in the implementation