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No Time to Rest: Leadership Required in EU Climate Diplomacy after Paris

by Stephan Wolters and Dennis Tänzler, adelphi

The [Agreement reached at the COP21 in Paris](#) last December was, by almost any standard, a landmark agreement and the successful culmination of years of tedious negotiations. The Paris Agreement commits 187 nations to a common objective, namely, a world with warming limited to well below 2°C, and climate neutrality achieved in the second half of the century.

The EU and its Member States can claim to be major contributors to this success as they managed to keep a united front, despite differences among Member States on subject matter, despite the strong headwinds and turbulent times in other policy fields, and despite the tendency of the Common Foreign and Security Policy to break up into less common, national government-driven positions whenever things get tough. On the contrary, at the COP21, diplomats put into action a smart negotiation strategy to build the 'High Ambition Coalition', which managed to break up the long-standing divide between developed and developing countries. This has been also a success of EU institutions, notably the Commission and the EEAS, who worked towards a common position across Member States from early on in the process, and of the Member States themselves, who contributed resources and political commitment to the cause.

"It will be crucial for the Foreign Affairs Council to follow up on its intention to elaborate a more concrete, more comprehensive and more ambitious action plan."

However, the ultimate success of the Agreement hinges on implementation. (I)NDCs, the contributions countries have committed to, are insufficient. The Agreement contains many elements to ensure that the objectives will eventually be achieved, but it will require a sustained effort in the years to come. EU Climate Diplomacy will need to keep up the positive momentum. Its [Foreign Affairs Council Conclusions from 15 Feb 2016](#) recognize this and pledge continued efforts to keep climate change a strategic priority to support



Photo by UNclimatechange / Flickr.com

implementation of the Paris Agreement and to address the climate-stability nexus. It will be crucial for the FAC to follow up on its intention to elaborate a more concrete, more comprehensive and more ambitious action plan – building on the rather fuzzy list of activities mentioned thus far. Here are some important elements for doing so:

- **Build a strategic vision and narrative for implementation** of the Paris Agreement. Looking beyond the negotiations themselves, diplomats can help build and communicate a visionary narrative, or rationale, on the sense and the benefits for each country to work towards the Agreement's objectives. It must become a cornerstone of climate thinking that the vast majority of emissions reductions needed can be done in ways that are beneficial to individual countries, e.g. by creating new jobs, improving the quality of life or increasing the competitiveness of the economy. Even more so when taking a broader perspective of the values, costs and benefits at stake, of distributional and other ethical considerations, and of international climate finance available.
- **Identify and support ambitious alliances.** More emphasis needs to be placed on cooperating with a number of different partners and alliances – the importance of such

an approach became obvious in Paris. For example, this is true for the private sector as a key driver of innovation. Another example is the G20 forum, comprising the major emitters needed for taking decisive action for a climate neutral world. The current Chinese and the upcoming German presidency can help to keep the momentum of the Paris negotiations going. A blind spot is still how to better integrate climate-friendly action across other policy fields, such as trade and investment, energy, etc.

“The EU and its Member States will have to have to take steps to align their action at home and their domestic policies with the Agreement’s long-term objectives.”

- Join forces and step up coordination among Member States. Synergies need to be exploited to achieve more with the same input. The Green Diplomacy Network has been pivotal, instrumental and promising in coordinating positions and sharing information, but this momentum is sometimes lost at the embassy level. Delegations and embassies can share their information and planned activities better and more regularly. Activities could be undertaken jointly - there have been useful initiatives last year, e.g. during the Climate Diplomacy Day - and efforts shared rather than doing the same work twice (or twenty-eight times).
- Ensure strong domestic action to build on. The messages diplomats want to bring across can only resonate if they are credible. And for that, the EU and its Member

States will have to take steps to align their action at home and their domestic policies with the Agreement’s long-term objectives. This will not only foster credibility, but also enable diplomats to make the case more strongly that the type of action they demand is feasible, and allow them to illustrate examples that can serve as building blocks for action elsewhere.

- Further improve climate diplomacy capacities of delegations. Delegations can be a key part to facilitate implementation but require input and training – also in view of rotating staff. Also they need a clear signal that they need to keep up the good work on climate action. The regular provision of information, with blueprints for activities and with regularly conducted briefings and discussion formats are key to update delegations on subject matters as well as to foster delegation-to-delegation exchange of experiences. Also, a reporting blueprint to sensitize diplomats to climate impacts could help diplomats to interpret and communicate climate-related information better. It can also enhance the EU Conflict Early Warning System, which currently does not adequately integrate climate and environmental risks.

These elements can form a robust basis to prepare the EU for the year 2018 where the first stocktaking will indicate whether Paris really can be considered as a success. But, one thing is already clear: it would send an unacceptable, contradictory signal to partners around the globe if the EU backtracks on its own levels of engagement and puts climate diplomacy on the backburner.

Focus: Climate Diplomacy

Climate Change, Instability and Migration: Forging a Positive, Sustainable Response

by Benjamin Pohl, adelphi

The climate conference that took place in Paris in 2015 has repeatedly been billed as a crucial global summit – even as a decisive moment in human history – and its **results have been judged as historic**, too.

Important as climate change is, however, migration clearly dominates the political agenda in Europe, also in Germany.

Pride of place goes to the influx of refugees and the challenges, imagined and real, that this entails for Europe’s security and social cohesion. What is less discussed are the links between large-scale displacement and climate change – although the German Minister for the Environment recently emphasized this connection in an **interview**.

A new EU Trust Fund on addressing root causes of irregular migration...

When the European Union launched an “Emergency Trust Fund for stability and addressing root causes of irregular migration and displaced persons in Africa” in November 2015, though, climate change was nowhere to be found in the nine-page decision. This is despite the fact that the three target regions in which the ‘root causes’ of irregular migration are to be addressed comprise the Sahel and Lake Chad region, the Horn of Africa, and North Africa. Due to a confluence of human (low adaptive capacity, reliance on rain-fed agriculture, climate-sensitive livelihoods, poverty, state fragility) and environmental factors (above-average temperature rises in Africa, pre-existing water stress, the vulnerability to droughts of semi-arid areas), these areas are extremely vulnerable to climate change already today. So, why not make that link explicit in the decision or fact sheet? I can think of only two plausible explanations, and both are troubling.

The first is that no one considered the connection (or that it was eventually deleted due to its perceived irrelevance). This would be troubling because it would reveal to what extent policy-making is still siloed. If that was indeed the reason, it would chime in with the assessment of our report A New Climate for Peace that mainstreaming climate change into the development, humanitarian and peacebuilding sectors is often more ambition than reality, particularly when it comes to systematic implementation.

“In reading the decision in its entirety,
it is hard to escape the feeling that the EU’s
emphasis is on addressing symptoms
rather than underlying drivers.”

The second explanation is that the EU lacks the ambition or confidence to drill down to the real ‘root causes’ it purports to target. That explanation could be rooted in the political context of the Fund’s emergence in 2015 as pictures emerged of refugees drowning in the Mediterranean on their way from Africa to Europe, dominating media attention until even greater numbers started arriving via Turkey. Given the pressing immediacy of such images, the focus on short-term measures might seem natural.



Photo by Kristy Siegfried / IRIN News

Ambitious structural foreign policy needed

And yet: even if that were the explanation, it would still be worrying if the Union were to focus its ambition on strengthening third-party border security agencies in the hope that those measures will stem the flow. This reading would misrepresent the Commission’s decision which repeatedly refers to employment opportunities, food security, the rule of law, and governance (and yes, it mentions ‘environmental stress’ in the opening paragraph). However, in reading the decision in its entirety, it is hard to escape the feeling that the EU’s emphasis is on addressing symptoms rather than underlying drivers.

To be clear: there are good reasons for seeking to improve state capacity in Europe’s Southern neighbourhood. There may also be good reasons for emphasizing collaboration with government security agencies in the region. However, by limiting itself to paying whoever has the greatest capacity to stop migrants, the EU not only fails to address the root causes of illegal migration, it sells itself short in terms of the ethical global power it wants (and claims) to be.

The ‘realism’ that has led Europe to embrace authoritarian governments for the sake of stability might buy time; but as developments in the Middle East and North Africa since 2011 have shown, that approach comes at the expense of delaying, and potentially aggravating, the ensuing crises. Opportunism can be a hallmark of good foreign policy, but it is rarely enough.

So, this is where we are. What is to be done?

The way forward

In one way, the decision is a missed opportunity to highlight the interconnected nature of climate change, instability, and

migration and the resulting need to respond with integrated policies. But in another way, many of the right elements are already there. The Fund's objective of promoting resilience, economic and equal opportunities, and security and development is certainly broad enough to incorporate projects and programmes that generate co-benefits for climate adaptation, development and peace.

“What is needed, however, is more systematic recognition of the links between climate change, development and humanitarian efforts and peacebuilding.”

The emphasis should be on identifying or designing programmes which pursue these objectives in an integrated fashion: **climate adaptation that is conflict-sensitive** and **climate finance that simultaneously builds resilience to state fragility**, development and humanitarian efforts that are cognizant of climate risks, and **peace-building programmes that are climate-resilient**. The Fund's objectives do not only contain the right elements; in fact, these have already been embraced by the EU. The Union has developed a comprehensive EU Action Plan for Resilience in Crisis Prone Countries for the region.

In other words, there is no need for revolution. What is needed, however, is **more systematic recognition of the links** between climate change, development and humanitarian efforts and peacebuilding. What is even more important is cultivating widespread awareness about practical ways to address the root causes of migration and links to climate change.

There are numerous entry points for the EU to tackle the real root causes of illegal migration and strengthen stability in North Africa, the Sahel and the Horn of Africa. They range from leveraging natural resource management as a tool for peacebuilding within and across borders, to integrating environmental impact assessments into humanitarian and development interventions, to reinforcing technical and financial cooperation in support of water sector reform and agricultural water use efficiency programs, to name just a few.

If the EU stood ready to invest in addressing climate-fragility links at a scale similar to its investments in defence measures vis-à-vis migratory pressures, it would not only achieve more sustainable effects, but also strengthen its standing and influence in a world in which Europe still articulates the ambition to be a significant force for human progress. It would also help millions among the most marginalized. This would not only counteract migratory pressures, but would also weaken the arguments of those intent on overturning rather than adjusting the current, post-Cold War order – a key to long-term stability, and a crucial European interest.

Repeated Western efforts to impose short-term solutions in the region have visibly gone wrong. So we are in it for the long game anyway. That calls for strategic patience – and for getting started on building a positive, sustainable legacy that comprehensively addresses the root causes of instability and displacement.

This is a shortened version of a post that appeared on [Resilience Blog](#).

Regional Highlights: Sub-Saharan Africa

Lessons from Uganda on Strengthening Women's Voices in Environmental Governance

by Blake Ratner, WorldFish; Clementine Burnley and Paola Adriázola, adelphi

Ask Agnes Namukasa about sustainably managing fisheries in Kachanga, the lakeshore landing site she calls home in Uganda's Masaka District, and you will soon learn about toilets. From her perspective, community members won't address conflict between government enforcers and fishers, competition among neighbouring villages or pollution

threatening aquatic ecosystems until they can first organize to address their most pressing daily needs. And in Kachanga, where chronic childhood diarrhoea and a host of other illnesses stem from poor sanitation, those essentials include public latrines.

It's become popular to say that the health of the environ-

ment and the health of human communities are interlinked. Yet much of the investment aimed at solving environmental crises still fails to make these connections. How can we do better?

One of the simplest and most effective means is to engage those most at risk in open and inclusive dialogue about the roots of current problems and strategies for addressing these. In most poor, rural communities in the developing world, that requires particular attention to strengthening women's voices.

Fishing fights to biogas toilets

Kachanga, like many villages dotting the edge of Lake Victoria, is heavily dependent on fishing, a sector critical to the national economy – and one fraught with conflict. In September, the recently established National Fisheries Task Force **impounded and set fire to 1,000 illegal fishing nets and gear** collected from five districts around the lake, along with nearly four tons of undersized fish. The same month, **four Ugandan fishermen died** near the Tanzanian border, allegedly in a confrontation with Tanzanian pirates on the lake.

“One of the simplest and most effective means is to engage those most at risk in open and inclusive dialogue.”

When **adelphi** and **WorldFish** launched an **action research partnership** in Kachanga and nearby communities in collaboration with Makerere University in 2012, we knew it would be a challenging place to test the possibilities of **multi-stakeholder dialogue** to address the roots of environmental resource conflict. While most research on community-based natural resource management focuses on places with a strong history of collective action, Kachanga forced us to ask, what does it take to build collaboration in a place with high migration, where community institutions have little track record, where government services are weak and mistrust is widespread?

During long discussions with community representatives, business people and fisheries extension officers, it became clear that little progress would be made addressing the problems of fisheries co-management on Lake Victoria without tackling people's underlying dissatisfaction with



Photo by Ryder Haske / WorldFish

public services. Women participants, in particular, highlighted concerns over poor sanitation and public health, which ultimately became the initial focus of collective action.

The dialogue process was slow at the beginning. Ground rules had to be established and, despite the presence of women in local leadership roles, facilitators had to employ targeted techniques to encourage women to speak and men to listen, especially with higher authorities present. There were some confrontations, but ultimately participants learned a more collaborative way to get their demands addressed.

One of the early achievements was government co-investment in the construction of a public latrine. These toilets also produce biogas to fuel a common cooking facility, each managed by community groups and maintained by user fees. Some women found their public voice through the initiative and these champions are pushing for action on other public health and natural resource management priorities.

Including the excluded

Strengthening women's voices is essential to improving environmental governance, shifting attention to the priorities that matter most for human security and welfare, and building the type of effective, inclusive institutions that are necessary to manage future natural resource competition. Exclusion from decision-making increases vulnerability of rural households, making it more difficult for them to move out of poverty and thwarting broader efforts to achieve sustainable resource management. Poor rural women, in particular, often face institutionalized barriers to effective participation in resource management.

Structured efforts to create inclusive dialogue, like those outlined below, can help address those barriers, contributing to more equitable resource management and more resilient livelihoods. A [policy brief](#) from the [Collaborating for Resilience](#) initiative includes these recommendations:

1. Conduct collaborative analysis to understand how gender hierarchies, norms, and values operate to restrict women's participation. In organizing dialogue processes, facilitators can pay attention to power hierarchies and specifically support participants who are hesitant to speak up. A host of [dialogue tools](#) can be used to explore power dynamics collectively; for example, the "opening windows" exercise has groups assess separately and then discuss what they see as areas of open information flow, hidden agendas, blind spots and unknowns.

2. Create safe spaces for discussion within tradition. Inclusive dialogue aims to trigger changes that lead to longer-term transformations, including women having an equal voice to influence development decisions within mixed groups. A [gradual process to engage women and men separately](#) may be needed to probe issues they are otherwise reluctant to express in a mixed group. It may also require identifying trusted intermediaries charged by a group with bringing their concerns forward.

3. Design programs to contribute to transformative outcomes. Changing underlying behaviours, norms and structures is complex and takes time. It may require changes in policy, law and institutional capacities. It also requires [linking multiple actors across scales](#) and addressing power relations. Pursuing equity in natural resource management decision-making will not in itself resolve these broader challenges, but structured dialogue can help identify and address sources of conflict in ways that improve people's livelihood resilience. It can also build experience in processes of social and institutional transformation that can be applied in other domains.

In Uganda, as elsewhere, ensuring that typically excluded groups are included in decision-making over natural resource management requires work to understand the barriers to inclusion and address these. It also requires a readiness to support the priorities that emerge from participatory processes so that inclusive dialogue complements long-term efforts to transform underlying inequities..

The full version of this post originally appeared on [New Security Beat](#). This post includes excerpts from [Supporting Gender-Inclusive Dialogue over Natural Resource Management](#), a policy brief by Clementine Burnley and Katherina Ziegenhagen. A fuller account of the Uganda case study [can be found here](#).

Regional Highlights: South America

Transparency and Dialogue in the Extractive Industry in Latin America

by Ivan Ormachea, ProDiálogo; Mitzy Canessa, Grupo de Diálogo Latinoamericano; and Volker Frank, Fundación Futuro Latinoamericano

On 10 and 11 December 2015, an event on [Transparency and Dialogue in Extractive Industries in Latin America: a Contribution to Sustainable Development in the Region](#) was held as a starting-point to jointly develop regional principles of transparency in the extractive industries and reflect on challenges faced by different sectors. This event put on record the commitment of the [Latin American Dialogue Group: Mining, Democracy and Sustainable Development \(GDL\)](#) and their collaborators to begin developing a protocol on transparency for countries of the region.

GDL is a regional integration initiative with an over three-year track record, fostering democratic, equitable dialogue among stakeholders from government, companies and civil society to promote sustainable development, greater transparency and best practices in public and private governance in the context of extractive industries. GDL members are dialogue platforms in Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Panama and Peru.

During the event on Transparency and Dialogue in Extractive Industries in Latin America, 200 representatives from the

business, governmental and civil society sectors expressed diverse perspectives and opinions about transparency and creating a regional protocol for it. Participants agreed that transparency:

- is fundamentally a principle to relate constructively with others, specifically by applying it in three sectors: state, companies and civil society.
- is vital to improve quality of life for all and contribute to sustainable development.
- not only refers to fiscal issues but also includes other dimensions such as investing resources, the impact generated and social and environmental aspects.
- must be a means to get to the bottom of issues. Care must be taken that transparency does not lead to false conclusions or mistaken perceptions.
- requires timely information and communication, while ensuring that forms and mechanisms are adhered so all can understand well, which is vital for transparency.

It is fundamental to construct relations of trust for dialogue and transparency, therefore this must be viewed as a joint responsibility, always bearing in mind that to ensure equity in dialogue, power asymmetries must first be addressed. This means empowering those who, because of their social and economic standing, have historically been disadvantaged vis-à-vis the state, market, business and the patriarchy permeating all sectors and settings. In other words, activities must maintain an intercultural and gender perspective.

“Transparency becomes a keystone in addressing issues of importance such as access to information, citizen participation, sustainable development.”

The event was GDL's first step towards creating an agenda for **transparency in the extractive industries**, especially mining, considering that there is an appropriate context for promoting adoption of a working protocol on transparency in the region. This should help bring together other areas of interest as well. So, transparency becomes a keystone in addressing issues of importance such as access to information, citizen participation, sustainable development, the mining legislation, royalties, public investment based on these resources, the social and environmental impact of mining activities, among other issues. It also requires greater transparency and accountability to avoid problems



Photo by Santiago La Rotta / Flickr.com

such as environmental pollution, corruption and destructive conflicts.

For 2016 and 2017, the eight dialogue platforms comprising GDL will address transparency at the national level and from a regional perspective. This shall take place within the framework of dialogue and through dialogue-based methodological tools because GDL feels that in the context of mining, truly sustainable local development is possible only within the dynamics of democratic dialogue.

After the event in December 2015, GDL's Executive Committee has agreed on a road map to move toward a protocol for transparency. This protocol will integrate environmental, social, financial and institutional information about extractive activity and certain extraction projects in the region and make it available to the public. This will be developed on the basis of existing public legal information and will be able to incorporate additional information yielded voluntarily through dialogue by the public and private sector and by civil society.

For 2016 it is planned to work with assessments of transparency nationally and regionally, agree on the topics and indicators to include in the protocol, start a virtual platform for transparency and publish a first regional report on this topic. The **December event** on transparency and mining showcased the progress already made by GDL and was also a landmark in joining forces among eight countries in Latin America to achieve greater transparency in mining activity in the region.

Tackling the Environmental Risks Faced by Cities in India and Beyond

by Dhanasree Jayaram, Manipal Advanced Research Group (MARG), Manipal University

The Indian states of Tamil Nadu and Andhra Pradesh experienced the worst deluge in a century during the months of November and December in 2015 due to “freak weather” conditions that developed in the Indian Ocean. On 1 December 2015, Chennai (Tamil Nadu’s capital city) received a record 490 mm of rain over a 24 hour period. India has been a victim of many such episodes in the past few years – among them the 2005 Maharashtra floods (that devastated the business hub of India, Mumbai), the 2013 Uttarakhand floods (that killed more than 5,000 people and obliterated many pilgrimage centres), and the latest being the floods in Tamil Nadu in which the port city of Chennai saw its highest rainfall in 100 years.

What caused Chennai’s floods – are disasters more human-made than natural?

There is one common element in all these disasters: apart from the obvious extreme weather event, what really aggravated the situation was the human element, or rather human intervention. In cities such as Mumbai and Chennai, poor urban planning was what caused the real disaster. Haphazard urbanisation, encroachments, poor reservoir management, blocked drains, massive construction drives and indiscriminate solid waste disposal are all to blame for the disaster that struck Chennai.

Rapid and unplanned urbanisation – expansion of transport systems and housing, and creation of an Information Technology (IT) corridor and special economic zones (SEZs) among others – has come at the expense of many critical ecosystems that should have been catchment areas.

Another cause for the flooding was identified as disastrous reservoir management. Chennai has forecasting and early warning systems such as the Doppler Weather Radar in place. Although various meteorological agencies had warned of heavy rainfall in late November and early December in the city, no major steps were taken to manage the reservoirs appropriately by releasing adequate amounts of water before the heavy rains began.

The fact that Chennai did not learn from the Mumbai disaster



Photo by Kurkul / Shutterstock.com

ter is quite apparent. The question remains if Mumbai itself has done enough since then to prevent another disaster of a similar or higher scale and intensity. After the 2005 floods, Mumbai might have put in place a robust flood prediction and warning system, including automatic rain gauges and disaster control rooms for transmission of real-time data. But on the city planning and infrastructure front, builders are exploiting loopholes to go ahead with their projects including on salt-pan lands.

The far-fetched implications of urban flooding

Urban flooding is an issue that India cannot afford to take lightly, especially at a time when its cities are growing rapidly. Cities are the economic centres for manufacturing, services, R&D and so on. More than 500 people are said to have lost their lives in the Chennai floods. The floods reportedly caused a loss of US\$ 3 billion to the Indian economy, with IT companies alone suffering a loss of US\$ 60 million. However, what the disaster has also brought out is that insurance penetration in India is very low. This needs to change as the insurance sector is one of the foremost drivers of policy change in environmental risk assessment and management.

When cities are struck by such disasters, the implications are not just local; their impacts are felt across the globe. For instance, the 2011 Bangkok floods took a toll on global business and consumer confidence by disrupting manufacturing and production in a number of sectors. In the same

vein, if India desires to translate its national programme – “Make in India” – into a successful venture, the government must regularise urbanisation and increase its cities’ resilience through sound adaptation strategies, so that investor confidence is not dampened.

“One aspect that every nation state needs to take into consideration is helping cities become more resilient.”

Cities at risk on a global scale: the need for international response

Looking at the larger picture, Indian cities are not the only ones that are being pressured by the vagaries of environmental change and indiscriminate developmental activities. Much of the developing world is struggling to cope with these challenges. While Bangkok (Thailand) has repeatedly been affected by floods (almost an annual phenomenon), Jakarta (Indonesia) has also been in the news for flooding events, including in 2015 when even the [Presidential Palace](#) and the National Museum were inundated, mainly due to insufficient pumping capacity. A [drought-hit São Paulo](#) (Brazil) was struck by floods in 2015. Shanghai (China) is at risk of being submerged not because of rising sea levels but land subsidence. Even though some of these cities are known to receive heavy annual rainfall, the damaging effects are increasing while the mitigation efforts are not commensurate with the risks being faced by them.

Even in the ‘developed’ world, the challenges are plentiful. In the U.S., the December 2015 floods that affected the states of Missouri, Texas, Illinois, Arkansas, Oklahoma, Mississippi,

Tennessee, Alabama, Kentucky and Indiana generated economic losses worth [US\\$ 4 billion](#). In the month of December alone, floods in the U.S. and the U.K. have led to insured losses to the tune of US\$ 4.2 billion. Cities such as [New York and London](#) have overstretched infrastructure as well. The mistakes that Mumbai and Chennai are making right now have already been made by the developed countries in the past. The uncertainties in weather and climatic patterns have nullified the measures that have been taken.

All these stories point to the fact that much more needs to be done at the international level to save these cities that are densely populated and are also the financial centres that drive the international economy. As the Paris climate deal is enforced, one aspect that every nation state needs to take into consideration is helping cities become more resilient to environmental/climatic/physical challenges. As countries have agreed to dedicate a significant amount of resources to adaptation, this is one area that the international community cannot afford to neglect as it affects them all – whether it is in urban planning or setting up early warning systems. Through climate diplomacy, countries could cooperate in this direction and mitigate the effects of disasters (such as flooding caused by freak weather events) on cities. India, being home to some of the most disaster-prone cities of the world, needs to lead international efforts just as it did in the case of the global solar alliance.

Disclaimer: The views expressed in this article are personal
For the full version of this article, please visit [Climate Diplomacy](#).

Topics: Technology & Innovation

Mission Innovation: a Much Needed Policy-Innovation for International Climate Policy

by Johannes Ackva, adelphi

At the beginning of last year’s COP in Paris, political leaders from twenty countries came together to announce [Mission Innovation](#), a commitment to double publicly funded Research & Development (R&D) into low-carbon energy alternatives over the course of the next five years. Together with its private sector counterpart, the [Breakthrough Energy Coalition](#), this effort gives an unprecedented role to energy

innovation policy, particularly noteworthy in the context of international climate policy, which has traditionally focused on emission targets and carbon pricing. This post will argue that Mission Innovation provides an essential addition to the climate and energy policy mix that should receive far more attention in the future.



Photo by Gobierno de Chile, Ceremonia de lanzamiento de la Iniciativa „Mission Innovation“, November 30, 2015, CC Attribution 2.0 Generic License

I Why bother? Does Mission Innovation matter in the energy policy mix?

With much of the climate debate focusing on carbon pricing or subsidies for renewable deployment (such as **feed-in tariffs in Germany** driving the Energiewende or the **Renewable Energy Production Tax Credit (PTC)** in the US), one might wonder why the strengthening of a third element – energy innovation policy – should be crucial in tackling the climate challenge (see Figure 1 visualising the triangle of instruments). After all, if the only **market failure leading to climate change** was that the negative effects of carbon emissions are not considered in economic decisions, then putting a price on carbon – through emission trading systems (ETS) or carbon taxes – should be sufficient to solve the climate crisis. This view, once held by **Thomas Friedman**, is still influential as carbon pricing arguably dominates the international climate policy debate. Similarly, proponents of low-carbon technologies such as **renewables** or **nuclear** often argue that all necessary technologies already exist and it is simply a matter of the political and economic will to **deploy them**. In both of these views, Mission Innovation, an increase in public R&D for the development of new technologies, is a side-show or even unnecessary. To make the case that this is a dangerous misperception, section II will argue that the underlying assumptions of these views are likely false, whereas section III will provide the positive case for a much stronger role for energy innovation policy.

II An increased focus on energy innovation policy as exemplified by Mission Innovation is essential solve the climate crisis.

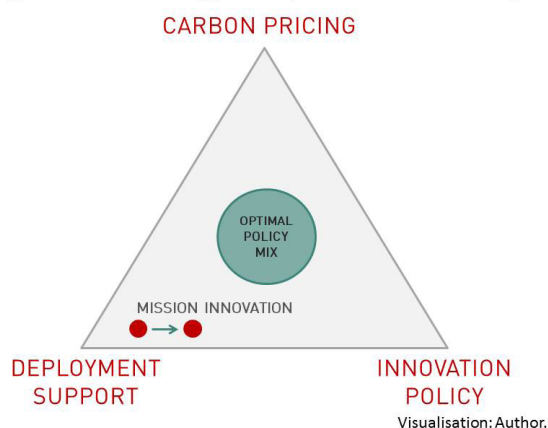
There is a massive need for additional technological innovation. When considering projected energy demand, most

energy scenarios compatible with the 2°C target **assume historically unprecedented rates of renewable energy expansion and/or a significant share or even expansion of nuclear power**, the latter – for better or worse – seen as undesirable by many environmentalists.

While sometimes argued for by advocates, it is a **fairly questionable and highly risky assumption** that all technologies for global decarbonisation are already available and that they will take the form of present-day renewable technology (even leaving aside the many technological hurdles to be solved relating to intermittency, storage and non-electric forms of energy). Indeed, as argued for in detail by the authors of **a recent review of global decarbonisation scenarios**, it is likely that “deep energy system decarbonization [will] require an ambitious, focused agenda of rapid innovation and improvement in every critical technology area, even those commercially available today.” Given that the deployment of low-carbon technologies is still marginal compared to the required scale for decarbonisation, it also makes sense to judge current policies – be them deployment, carbon pricing or explicit RD&D – by their ability to facilitate future deployment by reducing cost and increasing efficiency and reliability.

Carbon pricing alone does not induce sufficient innovation. Carbon pricing, either through emission trading or carbon taxes, has been the prime focus of international climate policy and it plays a central role in shifting to a low-carbon energy transition. However, pricing carbon alone and leaving innovation to the market is **unlikely to induce sufficient innovation**. There are at least two reasons for this – one political-economic and the other related to the economics of innovation.

Figure 1. An Energy Policy Instrument Triangle



First, it is very unlikely that a carbon price that fully reflects the negative effect of carbon emissions is ever reached on a global scale. While the estimates for the social cost of carbon vary widely and by orders of magnitude (for example, the [US Environmental Protection Agency](#) considers values between USD 11 and 105 per metric tonne of CO₂ for 2015 in 2007 USD), even the lower bound of these values is higher than the [carbon price in the EU ETS](#) in 2015, a polity far more concerned with climate change than the global average. Higher estimates of the social cost of carbon (e.g. USD 105), associated with the more catastrophic [climate change scenarios](#) we should be [most worried about](#), seem politically infeasible to ever be reflected by carbon pricing instruments.

Second, even if there was a carbon price high enough to fully internalise the negative externalities of carbon emissions, innovation suffers from the additional market failure that the gains from technological innovation are, to a large degree, public goods – accruing to entire sectors and the world economy and thus being under-provided by profit-maximising firms as well as national governments. From this analysis, which is [broadly shared among economists](#), follows not only a mandate for national governments to step in to facilitate innovation nationally, but also a clear rationale to jointly commit internationally to overcome the under-provision that would likely follow from national interest calculations alone.

Apart from this consensus on the importance of basic research government R&D, there is also a somewhat narrower but still solid consensus among innovation scholars that governments have played a very active role in most fundamental technological breakthroughs – such as nuclear energy, microchips, hydraulic fracturing and the internet – and that there are good reasons for government involvement far beyond basic R&D (for example, see these detailed [case](#)

[studies](#) and [analysis](#) on the American case [here](#); and [here](#) for an excellent discussion of the development of the energy innovation consensus).

Deployment support, such as feed-in-tariffs, is unlikely to induce sufficient innovation

If we know that innovation will not be incentivised sufficiently/optimally by a carbon price alone, the question arises what the right role of innovation policy should be vis-à-vis the other major class of policy instruments – deployment subsidies, such as feed-in-tariffs, for low-carbon technologies. Unlike carbon pricing that is politically difficult, support for renewables has until now been much more politically feasible, with subsidies corresponding to a carbon price of [EUR 174 per ton of CO₂ in Germany in 2012](#) (compared to an EU-ETS carbon price in the range of EUR 3-5 during that time). Apart from spurring an unprecedented rise in the installation of renewable capacity, the recent surge in policy support for renewable deployment has also contributed to radical cost declines of solar and wind through learning-by-doing and economies of scale. There is thus reason for optimism that the increased deployment, cost reductions, and incremental innovation are inciting an accelerated adoption of renewables that goes far beyond most expectations. However, there are two caveats:

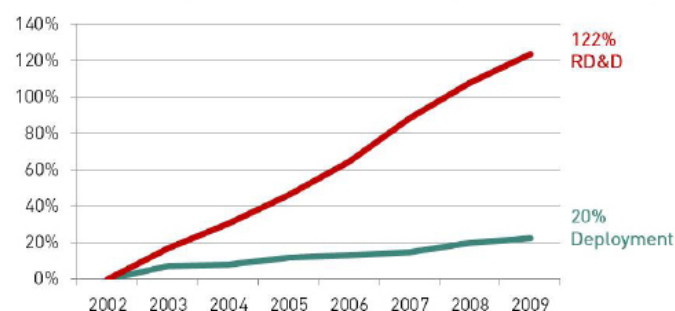
First, existing policies for renewables support are usually not rewarding innovation but deployment of existing technologies and, given the [increasing political and economic clout of existing renewable industries](#), this is unlikely to improve.

“In a world of limited funds for climate mitigation, choosing the most effective mix of policy instruments matters a great deal”

Second, and relatedly, policies explicitly focused on supporting innovation have – at their current level of application – consistently been found to be [much more cost-effective in inducing innovation](#) than the innovation created as a by-product of increasing deployment (peer-reviewed articles, [here](#), [here](#) and [here](#)). This does not mean that deployment subsidies such as the German feed-in-tariff do not induce innovation and cost reductions at all (arguably they do, as demonstrated by the rapid decline of costs for solar). Rather it means that the current balance between deployment and innovation subsidies is extremely tilted towards deployment and that this is extremely inefficient. A strong

example for this comes from [estimates of innovation effects from additional effort on deployment or RD&D policies in Germany between 2002 and 2009](#). In these estimates, visualised in Figure 2, a one standard deviation increase in RD&D would have increased patents (a proxy for innovation) by over 120%, whereas a one-standard deviation increase in deployment support would only have led to around 20% of additional patenting.

Figure 2. What difference would it make? The effect of additional deployment or RD&D on wind patents in Germany.



Innovation effect from a one standard-deviation increase in Deployment vs. RD&D compared to baseline. Calculations based on Zachmann et al. 2014, "When and How To Support Renewables?—Letting the Data Speak". Visualisation: Author.

In a world of limited funds for climate mitigation and a [rapidly decreasing carbon budget](#) consistent with the 2°C goal, choosing the most effective mix of policy instruments matters a great deal, not only for cost efficiency but also for successful mitigation being feasible at all.

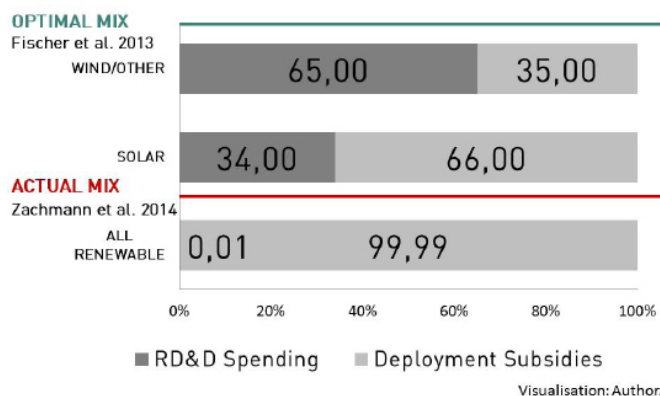
III A low-hanging fruit is a cheap lunch: The positive case for increased attention to energy innovation policy

Thus far, the argument has focused on the necessity for increased attention to energy innovation policy. But, just like decarbonisation would have many benefits even [if climate change was a hoax](#), increased energy innovation policy has many benefits even if the above arguments failed to convince.

The main reason for this is that energy innovation policy [has been neglected in the energy policy mix](#) despite its fundamental importance to providing cheap, clean and affordable energy. Whether compared to innovation activity in other sectors of the economy, to resources allocated to deployment support ([lesser by two orders of magnitude](#)) or to expected returns, energy innovation has been woefully neglected.

This makes it likely that there are substantial gains to be realised from increased spending from innovation as visualised in Figure 3.

Figure 3. Optimal and actual mix of RD&D and deployment for innovation.



[Estimates for the optimal ratio of RD&D to deployment subsidies for wind/other renewables and solar](#) suggest that at least one third of spending should be devoted to explicit RD&D in order to optimally induce innovation. In comparison, actual RD&D [spending in the six largest European economies in 2010](#) in comparison to the total of RD&D and deployment subsidies was close to only 0.01%.

As a recent report from the [Grantham Institute at the LSE](#) citing these numbers in the analysis of policy choices put it, the "marginal euro [...] spent on low-carbon technologies should go to R&D [e.g. innovation policy such as Mission Innovation] rather than deployment [such as feed-in-tariffs]."

In other words, since innovation has been so neglected compared to deployment and explicit R&D support is much more effective inducing innovation than deployment, an increase in funding for innovation policy will have a much higher impact than increased subsidies for low-carbon deployment (estimates vary across analyses and stages of technological maturity, but the effect can be huge, as illustrated by Figure 2 showing estimates for the case of wind).

IV Conclusion

As innovation policy is likely to be neglected by both fossil fuel industry interests as well as the interests of existing renewable technologies, and many of its likely beneficiaries (companies and entrepreneurs profiting from innovation support) are diffuse and in the future, it is of utmost importance that those concerned with climate change and clean energy for non-economic reasons aggressively push for the realisation of Mission Innovation to achieve the decarbonisation objectives so important to us.

For more information and references, please consult the [online version](#).

Urbanization and Climate Diplomacy: How to Realise the Potential of Cities for Ambitious Climate Action?

by Kaj Fischer, adelphi

After national governments achieved a global agreement on climate change in Paris, it is crucial to implement the respective commitments and identify potential for increasingly ambitious action. In this process cities will be essential. New Partnerships of cities, civic organisations like philanthropies and the private sector have shaken up traditional climate governance. Increasingly, established city networks make it more feasible than ever for national governments to engage with urban actors. However, their role in international climate governance does not yet match their potential. The report by adelphi on [Urbanization and Climate Diplomacy](#) examines how cities and city networks can be integrated into the current international climate policy architecture.

One of the indicators of the underestimation of cities' potential in the UNFCCC process is the fact that the [INDCs](#) lack a prominent focus on local governments for the transformation towards low carbon development. Analyses of the involvement of cities in [climate finance](#) suggest similar conclusions. Due to structural hurdles, multilateral financing is more accessible for national governments. These structures are constantly evolving, but institutional and human capacity building on a local level as well as enhanced vertical coordination are still needed.

Based on the analysis of the historic and current role of cities, their motivation to engage in global climate diplomacy and the wide range of emerging urban actors, the report recommends the following principles and measure to enhance the role of cities and especially the role of city networks:

Decisions about the role of cities vis-a-vis states and international organizations must be grounded upon the reality of interdependence

There is no clear line separating a local from a national or international issue – be it climate change, migration, or economic development. If solutions to such issues are incorrectly framed in zero-sum terms, this stifles the chance for their practical and sustained achievement. There is no



Photo by IR Stone / Shutterstock.com

“urban” or “national” problem: there are simply problems. Enhanced coordination and collaboration between all levels of government is a prerequisite for cities and city networks to effectively contribute to climate action.

There must be terms of engagement for city networks and the international community

It is vital to create a setting that allows all stakeholders to interact on an equal footing and to promote a better understanding of the nature and agendas of the plethora of city networks. A discussion on the conditions for effective engagement with city networks should therefore at a minimum address their internal governance, the number and global distribution of member cities, and the type of activities networks can contribute in the international process. The UNFCCC process provides a good opportunity to initiate this debate at the global level. Guidance can be drawn from the admission criteria for stakeholder groups at COPs, or the more recent experiences with the [Lima-Paris Action Agenda](#), which already specifically addresses cities and regions through the NAZCA Platform.

Improve coordination among city networks

City networks, too, could benefit from a clear delineation of their roles. The increasing diversification of such initiatives provides much needed flexibility but also calls for better coordination. For instance, it might be difficult for cities to choose an appropriate tool for assessing urban vulnerability

from the multitude of approaches available. A good example of an initiative that addresses such issues is the Medellin Collaboration on Urban Resilience, an alliance between UN-Habitat, UNISDR, the World Bank Group, IDB, GFDRR, the Rockefeller Foundation, 100 Resilient Cities, C40 and ICLEI. The Medellin Collaboration fosters harmonization of approaches and tools, catalyses access to finance and supports capacity building in cities. The Compact of Mayors is another good example of an initiative that fosters coordination amongst city leaders and city networks.

“If designed to be fair and mutually beneficial, cooperative relationships with the private sector can greatly increase the capacity of cities to tackle the challenges of climate change.”

Define the role of city networks in fostering cooperative relationships between the private sector and cities

National policies need to both regulate private industry emissions and strengthen cities' ability to deal with industry directly. The private sector is often an important ally of cities with respect to climate action, as exemplified by business involvement in C40, ICLEI and other city networks. This needs to be encouraged, while also strengthening transparency and accountability. If designed to be fair and mutually beneficial, cooperative relationships with the private sector can greatly increase the capacity of cities to pursue the kind of aggressive action that is needed to tackle the challenges of climate change.

Give urban issues stronger consideration in national climate policy

The future review of INDCs should call for enhanced vertical integration in national climate policy specifically addressing cities. City networks can act as a facilitator. They are able to mobilize their members and additional cities in signing up to global initiatives, such as UNISDR's [Making Cities Resilient](#) campaign, the [Durban Adaptation Charter](#) or the [Covenant of Mayors](#). They can also proactively engage in developing guidelines on vertical policy integration in the INDC process and they can provide substantial knowledge and capacity to integrate urban issues in national climate policy.

Use the pre-2020 period to test enhanced modes of engagement

As the Paris agreement will only enter into force in 2020, the next years provide a window of opportunity to explore new ways of collaborating with cities. More attention needs to be paid to the role of cities in climate finance, especially with respect to the GCF. While most networks are unlikely to qualify for accreditation, their close affiliation with many already accredited entities positions them well for an advisory role. In particular, networks can help to coordinate horizontal collaboration. For example, the [City Development Initiative for Asia \(CDIA\)](#) not only fosters regional dialogue and knowledge exchange, it also facilitates the pooling of infrastructure projects to reach required investment thresholds.

Upcoming Events

[Washington, DC, USA \(5-6 May 2016\)](#)

Climate Action 2016

Targeted at private sector, urban, academia and civil society actors, this [event](#) seeks to maintain the momentum of the successful climate conference in Paris and secure implementation. Some of the topics of the event are cities, land use, resilience, energy, transport, tools for decision makers and finance. Organizing partners include the World Bank, the Compact of Mayors, the World Business Council for Sustainable Development (WBCSD), and the University of Maryland.



Photo by Design for Health / Flickr.com

Istanbul, Turkey (16-20 May 2016)

Understanding Risk Forum

This biannual [forum](#) convened by the Global Facility for Disaster Reduction and Recovery brings together experts working in the field of disaster risk identification to discuss a wide array of [topics](#), e.g. connections of poverty and risk. Please visit the event's webpage to find related [reports and articles](#) as well as a list of [initiatives](#).

Istanbul, Turkey (23-24 May 2016)

World Humanitarian Summit

UN OCHA organises this unprecedented [summit](#), an initiative of UN Secretary-General, to specify actions that can help cope with crises and identify best practices around the world. The five key areas to be addressed by a new humanitarian agenda are dignity, safety, resilience, partnerships and finance. The key documents, including major reports and documentation of the public consultation process, are available [online](#).

Publications and Resources

Factbook News

by Johannes Ackva, adelphi

The ECC Factbook is an online tool that informs both policymakers and the general public about over 100 conflicts with an environmental dimension. It seeks to contribute to preventing, transforming and resolving these types of conflicts by helping users to better understand the drivers behind environmental conflict and to harness the lessons from earlier (non-) interventions.

Survey: your input wanted!

We want to find out what would make the ECC Factbook as useful for you as possible for you, and we would therefore very much appreciate your input on what type of information you are particularly interested in. We have kept the [survey](#) brief and visual. Thank you very much in advance!

Featured case - Changing Power, Changing Tides: Conflicts over Water in the Nile Basin

In a [new video](#) and [extended case coverage](#) we explore the complex dynamics surrounding conflicts over the Nile's water. From the Great Lakes of East Africa to the shoreline of the Mediterranean Sea, the Nile runs through 11 countries, covering a distance of almost 7000 km, providing freshwater to some 400 million people.

The river has also become emblematic of transboundary water disputes, pitting upstream development ambitions against downstream fears over water security. A changing balance of power between riparians shapes current developments.



Photo: Video Screenshot, adelphi

Using maps specifically created for the video as well as the extensive [factsheet](#) information, this video provides an accessible yet thorough primer to one of the world's most important water conflicts.

New cases & articles

Beyond the extended case coverage of the Nile, three new cases are especially noteworthy: two new cases analyse local water conflicts as well as public discontent in Yemen, whereas a third new case examines the interplay of climatic changes and fragility in northern Mali.

In addition, a blog post from Benjamin Pohl drawing on several ECC Factbook cases explores the influence of climate change on some of the world's most pressing conflicts according to the International Crisis Group's (ICG) 2016 list of ['conflicts to watch'](#).

New features

Since the last ECC Newsletter, we have added four exciting new features to the ECC Factbook:

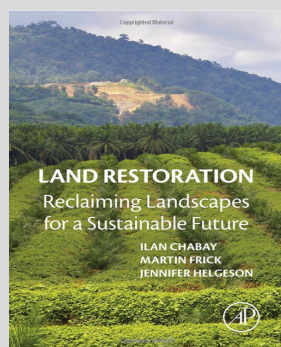
1. **Assorted Maps:** Explore specific case selections, for example all conflicts related to climate change, dam-building or mining and save the URLs of your own selections.
2. **Background on resolution strategies:** To provide easier access to potential and tried resolution strategies, we have extended the conflict resolution strategy display to allow much more contextual information to be displayed. We are in the process of extending this more detailed information across all cases.

3. **Commenting Functionality:** The commenting button on the right of all factsheets is the entry point to a commenting functionality, which allows users to challenge a case narrative and/or to point to additional information. We are very much looking forward to seeing you use this feature for discussion and collaborative improvement.

4. **Dossier Functionality Update:** For easier offline usage, we have improved the dossier functionality, which now allows for a comprehensive pdf export of all of the most important case information. Check out a selection of all Nile-related cases [here](#).

Publications and Resources

Reclaiming Landscapes for a Sustainable Future



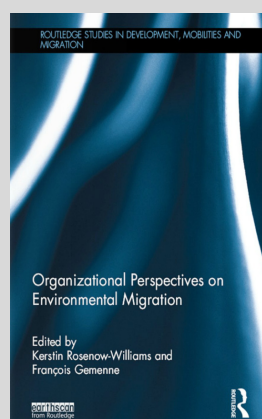
Land Restoration: Reclaiming Landscapes for a Sustainable Future is an **edited volume** that provides a holistic overview of land degradation and restoration in that it addresses the issue of land restoration from the scientific and practical development points of view. It brings together a wealth of connected issues, such as security, development and environmental issues. It collates findings from various levels of governance and experiences from diverse stakeholder communities toward a viable solution to one of the most pressing issues of our time.

Local Action Driving Transformation. Proceedings of ICCA 2015



The International Conference on Climate Action (ICCA2015) brought together 450 participants from 27 countries to exchange on political strategies, framework conditions and mechanisms for successful municipal climate action. This **report** comprises the main speeches and the results of six thematic workshops. It also includes the proceedings of the Climate Neighbourhood event with best practices of local climate action projects, as well as the conference's major outcome, the Hanover Declaration: Local Governments Driving Transformation.

Organizational Perspectives on Environmental Migration



This **book** edited by Kerstin Rosenow-Williams and François Gemenne brings together contributions on climate change and environmental degradation, migration and organizational studies, specifically addressing the role of international organizations, courts and advocacy groups. Both researchers and practitioners offer their perspectives on the complex phenomenon of environmental migration and on developments in this policy field during the last years.

Video Interview with ESA's André Kuipers



Photo:
Screenshot, adelphi

André Kuipers, a Dutch astronaut at the European Space Agency (ESA), **speaks** about his perspective on climate and environmental change. Pointing out the various ways in which human activities impact planet Earth, he emphasises the need for new approaches to safeguard ecosystems. This is one of the **interviews** conducted during the Planetary Security Conference in The Hague (2-3 November 2015) for the ECC Platform.

The newsletter „Environment, Conflict, and Cooperation“ is published several times a year. To subscribe or unsubscribe, please click [here](#).

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adelphi is a leading think tank for policy analysis and strategy consulting. We offer creative solutions and services on global environment and development challenges for policy, business and civil society communities. Our projects contribute to sustaining natural life systems and fostering sustainable enterprises.

Energy Poverty Research Group at the University of Queensland: EPRG was established at the University of Queensland (UQ), Brisbane by the UQ Energy Initiative and the School of Chemical Engineering in 2013. The EPRG is a transdisciplinary group which investigates how energy access and poverty alleviation are interconnected in developing contexts. It incorporates the disciplines of engineering, economics and business, communications and social change, and behavioural sciences to support enabling environments that can positively shape energy dynamics in impoverished communities. Bringing together research capability and innovation across disciplines, the group explores sustainable, reliable and affordable energy systems that are tailored to local and regional socio-economic contexts.

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Fundación Futuro Latinoamericano (FFLA) mission is to promote constructive dialogue, strengthen citizen, political and institutional capacities, and articulate processes towards sustainable development in Latin America. Therefore it utilizes multi-sectoral public policy dialogues and conflict prevention methodologies as its main strategies.

The **Manipal Advanced Research Group (MARG)** was formed in early 2006. Given the wide variety of expertise available at Manipal University this initiative seeks to establish synergies between fundamental research in the natural (physical) sciences and engineering. MARG has also launched the **Science, Technology and Security Forum (STSf)** website, which is intended to provide a platform to the larger strategic, academic, diplomatic and scientific community to participate in debates on matters impacting international security with a particular focus on Asia and in particular, India. The need for such a forum has its origin in the necessity to integrate scientists and technologists with the matrix of decision-making in matters of policy.