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El futuro que queremos.  
The future we want  
Будущее, которого мы хотим  
L'avenir que nous voulons  
我们希望的未来

**IDDRI**

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The Institute for Sustainable Development and International Relations (IDDRI) is a non-profit policy research institute based in Paris. Its objective is to determine and share the keys for analysing and understanding strategic issues linked to sustainable development from a global perspective. IDDRI helps stakeholders in deliberating on global governance of the major issues of common interest: action to attenuate climate change, to protect biodiversity, to enhance food security and to manage urbanisation. IDDRI also takes part in efforts to reframe development pathways.

A special effort has been made to develop a partnership network with emerging countries to better understand and share various perspectives on sustainable development issues and governance. For more effective action, IDDRI operates with a network of partners from the private sector, academia, civil society and the public sector, not only in France and Europe but also internationally.

As an independent institute, IDDRI mobilises resources and expertise to disseminate the most relevant scientific ideas and research ahead of negotiations and decision-making processes.

It applies a cross-cutting approach to its work, which focuses on five themes—agriculture, biodiversity, climate change, urban planning, global governance—and one cross-disciplinary programme—new prosperity.

As a Sciences Po partner, IDDRI's experts are highly involved in teaching and in developing research programs.

As a non-profit research institution acting for the common good, the institute posts all of its analyses and proposals free of charge on its website.

To view the scope of our activities, please subscribe to IDDRI's newsletter.

For information on IDDRI's governance,  
budget and staff, please go to pages 35 to 40.



## CONTEXT

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### 02 Foreword

Rethinking the governance framework  
(Laurence Tubiana, Jean Jouzel)

### 03 Editorial

The world needs  
Sustainable Development Goals  
(Jeffrey Sachs, Earth Institute, SDSN)

### 04 Introduction

2015 begins now

## ACTIVITIES

---

### 06 Publications

### 08 Key events

10 IDDRI-Sciences-Po Partnership

## PROGRAMMES

---

### CROSS-CUTTING THEMES

---

- 11 What future for growth?
- 12 The importance of participating in Rio+20
- 13 Exiting the European crisis and the green economy
- 14 Which policies for environmental migration?

### AGRICULTURE

---

#### 15 What projects for transforming agriculture?

- 15 Water scarcity, a challenge for food security and agricultural change
- 16 Transforming food systems
- 17 Agricultural foresight and international agricultural research
- 18 Sustainability and competitiveness: what public policies for agriculture in Europe?

### BIODIVERSITY

---

#### 19 Ocean governance and funding: the challenges of biodiversity

- 19 Taking action against ocean acidification
- 20 Access and benefit sharing at the heart of complex international negotiations
- 21 The need for better regulation of offshore exploitation
- 22 Questioning the use of economic valuations of biodiversity

## CLIMATE-ENERGY

---

### 23 Creating international momentum for the climate

- 23 Sovereign wealth funds: an opportunity for the green economy?
- 24 Strengthening the Franco-German cooperation on transition
- 25 The challenges of climate change for the Chinese economy
- 26 Avoiding maladaptation to climate change

## URBAN FABRIC

---

### 27 Overcoming the obstacles to sustainable urban fabric

- 27 Sustainable mobility, between energy vulnerability, taxation and ICT
- 28 Examining urban value creation
- 29 Structuring local climate policies
- 30 Lifestyles and environmental footprint

## GOVERNANCE

---

### 31 What development agenda for the post-2015 period?

- 31 Removing barriers to the implementation of sustainable development
- 32 Environmental taxation at the heart of sustainable fiscal reform
- 33 Social science to analyse the consequences of Fukushima
- 34 China-Europe, ending the conflict

## GOVERNANCE AND OPERATIONS

---

### GOVERNANCE

---

- 35 Institutional framework
- 36 Advisory council

### OPERATIONS

---

- 37 Budget
- 38 Team
- 39 Interns
- 40 Key Figures

# Rethinking the governance framework

**G**lobal governance today is flagging. Without a real leader country, the global economic and political system is struggling to find new resources to manage the multitude of shared problems that are continuing to grow as a result of globalisation: political and military security, migration, food security, environment, public health, the protection and distribution of natural resources, and world population growth. These shared problems vary in intensity; some that are manifested by faint warning signs are in fact major, such as the acceleration of climate change or population growth. And others, like the financial vulnerability of the global economy, are given far greater media coverage. In all cases, the development of responses to these issues is faltering.

However, the difficulty of moving forward together and reaching agreement does not mean that societies are standing still. While the world is unable to find new solutions, governments, companies, local authorities and civil society organisations are becoming aware of the new dimension of collective questions, sometimes of their gravity, and are attempting to provide some answers. Most countries are developing frameworks for public action and examining new technologies. Because no global climate agreement has been reached, cities are making low-carbon commitments. Networks of farmers or foresters are setting up technical models and marketing methods aimed at meeting sustainable management criteria. Companies are implementing business models that are moving away from the planned obsolescence of objects and promoting solutions with the lowest impact on natural resources.

These conflicting dynamics, with paralysis at the top and experimentation and movement at the bottom, are generating the increasingly accepted idea, considered almost as self-evident, that initiatives must be allowed to develop, movements to organise themselves and countries to define their own policies. Global governance could be built upon this pyramid of action and voluntary commitments, these different layers of projects and experiments, and these various levels of organisation, to ensure the sustainable development of a municipality,

town, region or country. The governance framework should reflect these dynamics, integrate them and accompany them with monitoring indicators and verification systems.

In reality, when the time comes to take stock, the sum of commitments, experiments and national policies does not take us far enough. The gap between what needs to be done – in terms of reducing greenhouse gas emissions, protecting biodiversity, and reducing the use of resources made non-renewable by overexploitation – and the business as usual scenario, which is unsustainable, is not closing fast enough in the time we have left.

Global governance cannot be the uncertain sum of action conducted at levels that are independent from one another. In fact, the different actions, however local they may be, are also defined from the viewpoint of global issues. Efficient local actors are also those who know how to hop from one level to another: attracting international attention here, and claiming a service to the global community there in order to demonstrate usefulness and value. Within the national State machinery, the agents of change are those who draw upon the experience of other countries and international frameworks to enable their own structures to evolve, to introduce new ideas and to help them to produce results. IDDRI's different programmes reflect these ongoing interactions.

Without a global framework, there can be no effective bottom-up solution. Without an agreement at the international level from all or most countries – and we see with tax havens how the weakest links sometimes define the success or failure of the whole –, efforts made will be insufficient. Isolated initiatives, if they do not benefit from collective dynamics or from economies of cooperation, will not produce any overall change. To meet the challenges of the century, international cooperation must once more become the driving force; we need to rethink the framework for this cooperation, but we must not abandon its ambition. ■



Laurence Tubiana  
Director, IDDRI



Jean Jouzel  
President, IDDRI

# The World Needs Sustainable Development Goals

The Millennium Declaration and the Millennium Development Goals (MDGs) have been remarkably successful in galvanizing world attention and action for the fight against extreme poverty in all its forms. The goals have become ubiquitous and have established clear benchmarks for reducing poverty, ending hunger, ensuring an education for every child, reducing child and maternal deaths, fighting diseases, and ensuring access to safe drinking water and sanitation. Thanks to the MDGs, progress in fighting poverty has accelerated in many parts of the world.

The MDGs will expire at the end of 2015, and last year's Rio+20 Conference adopted the concept of Sustainable Development Goals (SDGs) for the period from 2016 to 2030. As part of this global effort, the UN Secretary-General has launched the Sustainable Development Solutions Network (SDSN, [www.unsdsn.org](http://www.unsdsn.org)) to mobilize science, the research community and business for practical problem-solving on sustainable development at local, national, regional, and global scales. Laurence Tubiana co-chairs the SDSN, which I have the honor to direct. Under the SDSN we work closely with IDDRI and many other centers to support the global debate around the SDGs, identify practical solutions that can be scaled up, and build regional networks of problem solvers around the world.

These debates take place in the context of a radically different world. The challenges are severe, and the business-as-usual trajectory paints a bleak picture. On current trends, many countries will grow, but this growth is not sustainable. There will be rising inequalities, high population growth in some of the poorest countries, an increasing fight over scarce resources, and increased human impact on the environment.

But it does not have to be this way. The SDSN is developing a sustainable development framework that outlines a path of global cooperation and technically feasible structural transformation towards sustainable development. This framework is organised around the key dimensions of sustainable development: (i) ending poverty while maintaining economic development, (ii) social inclusion, (iii) environmental sustainability; and (iv) good governance and global partnership.

Twelve Thematic Groups have been convened by the SDSN to identify common solutions and highlight best practices. These Thematic Groups will focus on issues such as early childhood development, education, health, population dynamics, gender, inequalities and human rights, low-carbon energy, sustainable agriculture, forests, oceans, biodiversity and ecosystem services, sustainable cities, global governance and business.



**Jeffrey Sachs**  
Earth Institute  
Columbia University  
- Sustainable  
Development Solutions  
Network

No country can tackle the sustainable development challenges alone. Integrated solutions must be developed at local, national, regional and global levels. Every country must rise to the challenge since the traditional distinctions between developed and developing countries or between donors and recipients no longer describe the complex world in which we live. Likewise, businesses and civil society must work towards achieving sustainable development. A compelling framework for sustainable development is needed to mobilise all stakeholders, explain the challenges, focus operational action at the right scale, and form a basis for a true international partnership.

We are very pleased to work with IDDRI as we support the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda and the intergovernmental processes in developing and adopting a shared global agenda for sustainable development. This will not be easy—politically, technically or organizationally—but by mobilising the best expertise, the world will succeed in this important endeavor. ■

# 2015 begins now

**T**he year 2012 marked the 20th anniversary of the Earth Summit and a new campaign with a view to giving sustainable development a new framework for international action. The past twenty years have seen profound changes in global balances, yet international institutions have failed to take these into account. Over the past twenty years, we have also seen the promises of globalisation—including trade liberalisation, economic growth and poverty reduction—partially fulfilled but also considerably challenged.

The evolution of the global sustainable development agenda, its indecision and its achievements, and the Rio+20 summit in particular, can only be understood by taking into account these two major changes. New challenges have emerged, confirming the value of an institute such as IDDRI, which sits at the interface between decision making and scientific production, as a producer of analyses that are in tune with the negotiation processes and informed by the most in-depth understanding possible of policies and practices beyond negotiating positions.

## **Emerging countries: what role in the management of global public goods?**

Under the discriminatory effect of the crisis, which has mainly been affecting the old indebted economies since 2008, economic catch-up in the developing countries is accelerating and the income gap with the wealthy countries is decreasing for the first time in 50 years [Rodrik, 2011]. But there is still a good deal of uncertainty. The capacity of the least advanced countries to “emerge” in turn remains fragile: their most recent performances owe more to the increase in the prices of raw materials, which they exploit and export, than to real changes in their economies. The emerging countries are themselves in the deceleration phase—especially India and China since 2008—even if their growth rates remain well above those of the developed countries.

Despite the irrefutable assertion of their economic power, the emerging countries are still reluctant to position themselves as leaders in the negotiations on global public goods, even though they are now key actors in this field. At Rio+20, their governments kept to the traditional stances—the North-South divide, and renewed demands

for the protection of national sovereignty and the principle of common but differentiated responsibility—which contribute to the general paralysis of the multilateral negotiations.

## **Globalisation: and afterwards?**

The narrative of a supposedly successful globalisation has become our common history since 1989. However, this history seems to be coming to an end, in other words it is no longer a universal project uniting all nations. Inequalities between countries are growing; public support for the globalisation project is in marked decline according to different international surveys; political negotiations, particularly within the World Trade Organization (WTO), have been in deadlock for the last 12 years; and the community of trade economists itself, which has nevertheless played an important role in the construction of the history of globalisation based on comparative advantage, is in a quandary when it comes to writing the next chapter. It is the narrative and cooperative scope of this major project that today seems to have reached its limits, while sustainable development has been unable to offset its negative impacts or to impose itself as a credible alternative.

## **Rio+20: is sustainable development becoming universal?**

Although “The Future We Want”, the final text of Rio+20, fell short of expectations, it is a relatively faithful representation of the current state of international cooperation. The need for cooperation between States has never been so great on such diverse subjects as environmental protection, economic crisis management or regional security. But, paradoxically, the obstacles seem ever greater due to the multiplicity of actors involved, the growing complexity of problems and the ever clearer evidence of their political nature.

Both the preparations and the negotiation process implemented for and during Rio+20 illustrate the different States’ mistrust of the UN institutions. Ultimately, Rio+20 drew to a close, 40 years after Stockholm, without any agreement on the necessary transition of our economic and social models for greater acknowledgment of the limitations of our planet. However, Rio+20 offers us, among the different decisions taken, an avenue for

debate and action that has the capacity to make sustainable development universal, or at least to give the international talks a new shape and purpose. Most actors today seem to be convinced of the need to ensure that talks converge on the redefinition of the Millennium Development Goals (MDGs) and on the SDGs. Governance through goals is accompanied by conditions for success that concern research, training, the measurement of progress, finance and assessment. Building mechanisms linked to these subjects is urgent and is key to ensuring renewed confidence in our collective ability to act and to produce.

Between the transformative ambition of sustainable development (the integration of the three dimensions) and the political negotiations, the experience of the last 40 years shows that if the environment in the strict sense is negotiable—as are poverty reduction and social inclusion—cross-cutting subjects such as climate change (which is not just an environmental issue), the sustainability of patterns of consumption and production (likewise) or the reduction of inequalities (which is not just a social issue) are eminently more complex. Yet these are the real subjects of sustainable development.

### What role can IDDRI play in this context?

Sustainable development is not an observable state, or a standard, but the product of experiments aimed at transforming societies in their three dimensions. Observing, understanding, analysing, assessing and identifying the potential for change produced by these experiments, while ensuring their global coherence, are central to IDDRI's activities that should be pursued. Indeed, IDDRI continues to analyse and propose policies that, while giving serious attention to the issues of environmental degradation and the limitations of resources, offer original solutions. This is reflected particularly in the launch of a multidisciplinary work programme on the issue of “New Prosperity”, which examines the dynamics of growth and its interactions with the environment, and analyses the linkages between growth and a type of prosperity based especially on an environmental transition.

The mistrust of international institutions, the difficulty of negotiating binding tools and the

return to the very clear assertion of sovereignty all give institutions such as IDDRI a key role as an intermediary. IDDRI fosters dialogue between stakeholders by proposing analysis tools that make it possible to go beyond the fixed positions in the confrontation of interests, whether for the climate question – which the French government has requested IDDRI to support by organising a dialogue with the key actors (countries, NGOs, companies, think tanks, research centres, etc.) alongside and in interaction with the official negotiations –, the issue of economic tools for biodiversity management, the potential of the green economy, finance for recovery through green growth, the achievement of food security through sustainable agriculture, or the SDGs.

The year 2015 will be a turning point for the international community, with the prospect of the conclusion of negotiations on the SDGs, the adoption of a post-Kyoto climate regime and the launch of a negotiation process on the high seas. The perspective offered by the 2015 target has the virtue of mobilising public opinion and promoting the quest for a political consensus, but it is important that it not be seen as a deadline at the risk of causing disappointment and rejection should the results fall short of expectations. One of IDDRI's goals is to contribute to the definition of realistic objectives and ambitious policies that are likely to find an outlet in 2015. ■

« The year 2012 marked the 20th anniversary of the Earth Summit and a new campaign with a view to giving sustainable development a new framework for international action. Twenty years that have seen profound changes in the global balances, while the international institutions have failed to take these into account. Twenty years that have seen the promises of globalisation—including trade liberalisation, economic growth and poverty reduction—partially fulfilled but also considerably challenged.

# Publications

IDDRI's Publications  
Scientific Publications

## AGRICULTURE

« Information et affichage environnementaux dans le secteur alimentaire »

Gravey, V., Treyer, S., Montgomery, H. - *Policy Briefs* 12/12.

« Sécurité alimentaire en Afrique subsaharienne : faut-il une rupture dans le modèle agricole ? »

Egal, C. - *Policy Briefs* 04/12.

« Sécurité alimentaire en Chine : quels arbitrages ? Quels acteurs ? »

Schwoob, M.-H. - *Working Papers* 22/12.

“Greening the Farm Bill: how the budget deficit and the health crisis can support green policy”

Word, J. - *Working Papers* 12/12.

“Moving away from business as usual in agriculture”

Gravey, V. - *Working Papers* 10/12.

« L'eau dans l'équation alimentaire : dynamiques régionales pour un défi planétaire »

Treyer, S. - *Déméter* 2013.

“The State of Environmental Migration 2011”

Gemenne, F., Brucker, P., Ionesco D. - *Studies*.

“Is it in China's interest to implement an export carbon tax?”

Feng Li, J., Wang, X., Xiong Zhang, Y. - *Energy Economics* 34(6), 2072-2080.

“Analysis of emerging carbon markets: lessons and key challenges”

Tuerk, A., Klinsky, S., Mehling, M., Wang, X. - *Climate Strategies*.

“Distributional choices in EU climate policy: 20 years of policy practice”

Spencer, T., Fazekas D. - *Climate Policy* 13(2), 240-258.

“Key challenges of EU ETS in 2012”

Wang, X., Spencer, T., - Chinese Academy of Social Sciences (CASS) et China Meteorological Administration.

« Évaluer *ex ante* la pertinence de projets locaux d'adaptation au changement climatique »

Magnan, A. - *Vertigo* 12(3), December 2012.

« Reconstituer les «trajectoires de vulnérabilité» pour penser différemment l'adaptation au changement climatique »

Magnan, A., Duvat, V., Garnier, E. - *Nature, Sciences, Sociétés* 20, 82-91.

“Developing Policy Responses to Address Environmental Migration in Asia and the Pacific”

Gemenne, F., Brucker, P. - in *Environmental Leadership - A Reference Handbook*, SAGE Publications, 2012.

« Des migrants et des mots. Une analyse numérique des débats médiatiques sur les migrations et l'environnement »

Venturini, T., Gemenne, F., Severo, M. - *Cultures & Conflits* 88: 133-156.

Les outre-mer face au défi du changement climatique

Magnan, A., in *Rapport de l'Observatoire national sur les effets du réchauffement climatique* (ONERC), December 2012.

« Identifier et surveiller les impacts sanitaires du changement climatique pour s'y adapter » (Editorial)/“Identify and monitor the impacts of climate change on health, in an adaptation perspective”

Magnan, A. - *Édition spéciale du Bulletin épidémiologique hebdomadaire* 12-13: 145-146.

## CLIMATE-ENERGY

« Migrations environnementales en Afrique du Nord et au Moyen-Orient »

Brücker, P., Bougnoux, N., Wodon, Q. - *Policy Briefs* 13/12.

“Building successful carbon pricing policies in China”

Wang, X. - *Policy Briefs* 08/12.

“Durban climate talks: A small tectonic shift”

Spencer, T. - *Policy Briefs* 01/12.

“The political economy of Australia's climate change and clean energy legislation: lessons learned”

Spencer, T., Sènit, C.-A., Drutschinin, A. - *Working Papers* 21/12.

“The politics of carbon taxation in France: preferences, institutions, and ideologies”

Sènit, C.-A. - *Working Papers* 20/12.

« Les ‘frais réels’ : une niche fiscale inéquitable et anti-écologique ? »

Chancel, L., Saujot, M. - *Working Papers* 19/12.

“Which decarbonisation pathway for China? Insights from recent energy-emissions scenarios”

Belleprat, É. - *Working Papers* 18/12.

“Climate policies in China, India and Brazil: current issues and future challenges”

Belleprat, É. - *Working Papers* 16/12.

“Green investments in a European Growth Package”

Spencer, T., Chancel, L., Guérin, E. - *Working Papers* 11/12.

“Exiting the crisis in the right direction: A sustainable and shared prosperity plan for Europe”

Spencer, T., Chancel, L., Guérin, E. - *Working Papers* 09/12.

“China: Improving the local-central climate governance nexus - Challenges for climate policy and governance in key emerging countries Series”

Teng, F. - *Working Papers* 08/12.

“Brazil: Curbing forests emissions and anticipating energy issues”

La Rovere, E., Poppe, M. - *Working Papers* 07/12.

“India: Implementing incentives focused on energy”

Anuradha, R.V., Yadava S. - *Working Papers* 06/12.

« L'impact de la décision post-Fukushima sur le tournant énergétique allemand »

Rüdinger, A. - *Working Papers* 05/12.

“France's missed rendez-vous with carbon-energy taxation”

Sènit, C.-A. - *Working Papers* 04/12.

“What's behind Russia's climate policy? Small steps towards an intrinsic interest”

Chepurina, M. - *Working Papers* 03/12.

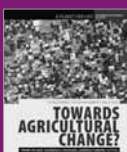
## BOOKS

A Planet For Life 2012 – Towards Agricultural Change  
IDDRI, AFD, TERI Press

150 questions sur l'océan et le climat  
Gemenne, F., Magnan, A., Rochette, J. - Le Pommier, Hors collection.

Controverses climatiques, sciences et politique  
Gemenne, F., Zaccai E., Decroly J.-M. - Presses de Sciences Po.

Ces îles qui pourraient disparaître  
Duvat, V., Magnan, A. - Le Pommier.





## BIODIVERSITY

« Que faire face à l'acidification des océans ? »

Billé, R. *et al.* - *Policy Briefs* 17/12.

“Defining market-based approaches for REDD+”

Pirard, R., Dooley, K., Pistorius T. - *Policy Briefs* 16/12.

“Resource Mobilisation for Aichi Targets: ambiguous lessons from research on market-based instruments”

Lapeyre, R., Pirard, R., Kleitz, G. - *Policy Briefs* 15/12.

« La 11<sup>e</sup> Conférence des Parties à la CDB : retour à la normale à Hyderabad ? »

Billé, R. *et al.* - *Policy Briefs* 14/12.

« Politiques contre nature ? Vers une réforme des subventions néfastes pour la biodiversité »

Pirard, R. - *Policy Briefs* 11/12.

“Valuation without action? On the use of economic valuations of ecosystem services”

Billé, R. *et al.* - *Policy Briefs* 07/12.

« Les aires marines d'importance écologique ou biologique : le processus d'identification dans le cadre de la Convention sur la diversité biologique et les avancées possibles »

Druel, E. - *Working Papers* 17/12.

“Towards an international regulation of offshore oil exploitation” - Report of the experts workshop held at the Paris Oceanographic Institute on 30 March 2012

Rochette, J. - *Working Papers* 15/12.

« L'économie au secours de la biodiversité ? La légende des Catskills revisitée »

Laurans, Y., Aouid, S. - *Working Papers* 14/12.

“Governance of marine biodiversity in areas beyond national jurisdiction at the regional level: filling the gaps and strengthening the framework for action”

Druel, E. *et al.* - *Studies* 04/12.

“The Nagoya Protocol on ABS: ratification by the EU and its Member States and implementation challenges”

Koester, V. - *Studies* 03/12.

“Strengthening the Western Indian Ocean regional seas framework: a review of potential modalities”

Rochette, J., Billé, R. - *Studies* 02/12.

« Une contribution à l'interprétation des aspects juridiques du Protocole sur la gestion intégrée des zones côtières de la Méditerranée »

Rochette, J., Wemaëre, M., Billé, R., du Puy-Montbrun, G. - IDDRI, Programme Liteau, CAR/PAP, PAM, UNEP.

“Analysis of the Croatian legal framework in relation to the provisions of the Protocol on ICZM in the Mediterranean”

Rochette, J., du Puy-Montbrun, G. - IDDRI, Programme Liteau, CAR/PAP, PAM, UNEP.

“Biodiversity conservation and poverty alleviation: a way out of the deadlock?”

Billé, R., Lapeyre R., Pirard, R. - *S.A.P.I.E.N.S (Surveys and Perspectives Integrating Environment & Society)*, 5.1. (2012).

« Rôle et limites de l'approche projet dans l'aménagement du littoral à Nador (Maroc) »

Rochette, J., Garnaud, B. - *Tiers Monde* 211

“The marriage of history to ecology. Book review on Shifting baselines: The past and the future of ocean fisheries”

Billé, R. - *BioScience* 62(10): 923-924.

“ICZM Protocols to Regional Seas Conventions: What? Why? How?”

Rochette, J., Billé, R. - *Marine Policy* 36(2012): 977-984.

“Applying foresight methodologies to the governance of marine protected areas in areas beyond national jurisdiction”

Druel, E., Billé, R., Treyer, S. - *The International Journal of Marine and Coastal Law* 27(1): 179-185.

“The Role of Private International Law under the Nagoya Protocol”, “Genetic Resources for Food and Agriculture and Farmers' Rights: an analysis of the relationship between the Nagoya Protocol and related instruments”

Chiarolla, C. - in *The Nagoya Protocol in Perspective: Implications for International Law and Implementation Challenges*, Morgera, E., Buck, M. and Tsoumani, E.

## URBAN FABRIC

« La mobilité, l'autre vulnérabilité énergétique »

Saujot, M. - *Policy Briefs* 05/12.

“Chinese influence on urban Africa”

Liu, X., Lefèvre, B. - *Studies* 06/12.

« Mobilité urbaine et technologies de l'information et de la communication (TIC) : enjeux et perspectives pour le climat »

Miroux, F. - *Studies* 05/12.

« La modélisation urbaine au service de l'analyse économique des politiques climatiques locales »

Saujot, M., Criqui, P., Lefèvre, B., Menanteau, P. - in *Modélisation urbaine : de la représentation au projet, Commissariat général au développement durable*, September 2012, pp. 108-120.



## OP-EDS

L'austérité, un piège antirelance

Tubiana, L., Stern, N., Ribera, T. - *Le Monde* (03 March 2012).

Ne pas exploiter le pétrole contre une rente : la fausse bonne idée du projet Yasuni ITT

R. Billé, Pirard, R. - *Slate.fr* (04 April 2012).

Greasing the wheel:

Oil's role in the global crisis

Spencer, T., Chancel, L. - *VoxEU.com* (16 May 2012).

Preparing for the Green Exit

Tubiana, L., Guérin, E. - *Project Syndicate*

(30 May 2012).

Pour une sortie verte

de la crise de la zone euro

Tubiana, L., Stern, N. - *Le Monde* (29 June 2012).

Les « frais réels », une niche fiscale inéquitable et anti-écologique ?

Chancel, L., Saujot, M., Colombier, M. - *Slate.fr*

(11 October 2012).

La Chine, « siphon » de l'économie mondiale

Ruet, J. - *Le Monde* (03 December 2012).

Doha : objectifs remplis jusqu'à 2015

Guérin, E. - *Terraeco.net* (18 December 2012).

## GOVERNANCE

“Concretizing vagueness: new momentum for development through sustainable development goals?”

Klapper S., Kranz N. - *Policy Briefs* 10/12.

“Clarifying the Muddle Over the Green Race”

Voituriez, T. - *Policy Briefs* 09/12.

“Powerful International Science-Policy Interfaces for Sustainable Development”

Treyer, S., Billé, R., Chabason, L., Magnan, A. - *Policy Briefs* 06/12.

“Rio+20 Voluntary Commitments: delivering promises on sustainable development?”

Ramstein, C. - *Working Papers* 23/12.

“Deliberating beyond evidence: lessons from Integrated Assessment Modelling”

Vecchione, E. - *Working Papers* 13/12.

“The Muddle over Green Race”

Voituriez, T., Balmer B. - *Studies* 01/12.

« L'effet BASIC sur la gouvernance globale du climat : le jeu des préférences et de la puissance »

Berthaud P., Voituriez, T. - *Économie appliquée* 12(2).

“Is it possible to provide evidence of insufficient evidence? The precautionary principle at WTO”

Vecchione E. - *Chicago Journal of International Law* 13(1).

“Reforming Agricultural and Trade Policy in France: The Limits of Multi-Actor Coalitions”

Voituriez, T., Daviron B. - in *Global Justice Activism and Policy Reform in Europe - Understanding When Change Happens*, Utting, P., Pianta, M., Ellersiek, A. (eds.), Routledge.



# Key events

## London (United Kingdom)

**26-29/03** IDDRI participation to the international conference "Planet Under Pressure - New knowledge towards solutions", on the issues of migrations and global governance.

## Brussels (Belgium)

**25/01** Intervention by Thomas Spencer in the framework of Confrontations Europe's working group meeting "UE/World" with Connie Hedegaard, European Commissioner for Climate Action.

## Brussels (Belgium)

**08/02** Workshop co-organised by the think tank Bruegel and IDDRI on long-term investment incentives for the energy sector decarbonisation.

## Brussels (Belgium)

**06/03** Intervention by Raphaël Billé in the framework of an information session at the European Parliament, "A Blueprint for the Ocean and Coasts at the UN Conference on Sustainable Development - Issues, Challenges and Solutions", organised by Kriton Arsenis (member of the European Parliament) and by UNESCO Intergovernmental Oceanographic Commission.

## Brussels (Belgium)

**13/07** Intervention by Sébastien Treyer in the framework of the Conference "The CAP towards 2020 - Taking stock with civil society" organised by the European Commission for the 50th anniversary of the Common Agricultural Policy.

## Paris

**30/01** International experts workshop on global environmental governance organised by IDDRI at the Conseil économique, social et environnemental (CESE) in the framework of the Rio+20 preparation.

Exceptional conference organised by IDDRI in the framework of the Rio+20 preparation with the participation of Brice Lalonde, Executive Coordinator for Rio+ 20, Julia Marton-Lefevre, UICN General director, and Luiz Alberto Figueiredo Machado, Ambassador in charge of the climate change negotiations.

## Paris

**23/03** Exceptional conference-debate organised by IDDRI during Sciences Po Research week, in preparation of Rio+20.

## Paris

**29/03** Exceptional conference organised with Sciences Po with the participation of Naomi Oreskes on the motivations and actors of climate controversies and the link between science and policy.

## Paris

**30/03** International workshop organised by IDDRI with the objective of identifying room for manoeuvre to ensure increased protection of the marine environment faced with pollutions coming from offshore gas exploitation.

## Paris

**03/05** Exceptional conference organised by IDDRI, the University of Exeter (United Kingdom) and the Woodrow Wilson International Center for Scholars, on the impact of climate change on security and conflicts.

## Paris

**11-12/05** International conference, organised by Unverscience, in partnership with the Academy of Sciences, AgroParisTech, AgroParisTech Alumni, Cirad, Campus Condorcet, INRA and IDDRI, on food security issues. Students recommendations are presented to national and international experts.

## Paris

**01/06** IDDRI-Fondation d'entreprise Hermès annual conference on biodiversity harmful subsidies.

## Paris

**04/07** Intervention by Michel Colombier and Andreas Rüdinger in the framework of the project "The energy transition: 2020-2050, building a future, inventing the way" organised by the Environment Department of the CESE.

## Paris

**09/10** First IDGM international workshop (IDDRI-FERDI), in partnership with the Ministry of Foreign Affairs, the French Development Agency (AFD), the French Global Environment Facility and the European Commission DG Research (FP7-SustainableRio project), dedicated to the post-2015 development agenda.

## Paris

**29-30/10** Conference organised by IDDRI and Green Budget Europe, on the role of environmental taxes in the framework of the European tax reform process.

## Paris

**27/11** Informal workshop organised by IDDRI aiming to prepare the next steps of the European climate and energy policies after 2020.

## Punta del Este (Uruguay)

**30/10** Intervention by Sébastien Treyer in the framework of the 2nd edition of the Global Conference on Agricultural Research for Development (GCARD).

## Rio de Janeiro

## Rio de Janeiro (Brazil)

**12-21/06** Participation and organisation of several events during the United Nations Conference on Sustainable Development, Rio+20.

### Berlin (Germany)

**19/06** Intervention by Emmanuel Guérin in the framework of the workshop organised by the Global Climate Forum, on the Franco-German dialogue in view of a new growth path for Europe.

### IDDRI Bonn (Germany)

**18/05** Side event organised by IDDRI on the Learning Platform initiative in the framework of the climate change Conference in Bonn.

 Saint Petersburg

### Saint-Petersburg (Russia)

**11/10** Intervention by Tancrede Voituriez in the framework of the international conference "Evolution of international trading system: prospects and challenges" organised by the Saint-Petersburg State University's Department of World Economy.

### IDDRI Vienna (Austria)

**21/09** Conference organised by the Ludwig Boltzmann Institute of Human Rights (Vienna, Austria) and IDDRI (Paris, France), in the framework of the "Climate-induced migration project and the need for new normative and institutional frameworks project" (ClimMig).

### Jeju (South Korea)

**10/09** Intervention by Elisabeth Druel in the framework of the IUCN World Conservation Congress on the governance of marine biodiversity in areas beyond national jurisdiction.

 Jeju

### Geneva (Switzerland)

**31/08** Intervention by Laurence Tubiana in the framework of the debate organised by the World Trade Organisation on its role in the definition of effective sustainable energy policies.

 New Delhi

### New Delhi (India)

**04/02** Intervention by Laurence Tubiana in the framework of the 12th Delhi Sustainable Development Summit.

 Hyderabad

### IDDRI Hyderabad (India)

**16/10** Side event organised by IDDRI and the L'Oréal research department in the framework of the 11th meeting of the Conference of the Parties to the Convention on Biological Diversity on the contribution of the access and benefit sharing (ABS) mechanisms on the conservation of biodiversity.

### IDDRI Bellagio (Italy)

**06-10/11** Seminar organised by IDDRI, the Stockholm Environment Institute (SEI) at the Center for Sustainable Development (CSD), on the issues at stake around the concept of maladaptation to climate change.

# Innovative teaching tools for alternative thinking and acting

In 2011, the partnership between Sciences Po and IDDRI led to the definition and implementation of the collective project entitled “*Copenhague, et si ça s’était passé autrement*” (COP RW – Copenhagen, what if things had been different?) bringing together more than 150 students who re-enacted the international climate negotiations in Copenhagen (2009). This new experiment, with its educational and scientific dynamics, proved to be a considerable learning experience and confirmed the relevance of simulations as a tool for raising awareness and ensuring mobilisation.

The Sustainable Development Chair at Sciences Po and IDDRI accompanied two student initiatives that evolved from this simulation, which saw the integration of this tool into the Sciences Po educational project. First, determined to convey the voice of young people to a higher level and to create long-term momentum, the CliMates association<sup>1</sup> is an international network of students that aims to use simulation to provide innovative solutions to the climate problem. IDDRI and the Chair support this network, which met for the first time in Paris in late October 2012. Second, wishing to go further in terms of testing negotiation techniques and hypotheses, the students of the MyCity+20<sup>2</sup> association decided to conduct action research and to organise a series of simulations of the negotiation a few days before Rio+20. Alongside the Chair, IDDRI supported this modelling of Rio+20 which was held from 4 to 8 June 2012 at UNESCO (as well as in some 15 cities, including Mumbai, São Paulo, Kinshasa, New York, London and Colombo) and involved around 100 students from different backgrounds (political science, economics, law, science, engineering) focusing on issues of sustainable development and international negotiations. The expertise of IDDRI’s researchers helped the future delegates to gain awareness of the underlying problems, to divide themselves into different governmental and non-governmental delegations and to compare their respective positions. Two delegates were then selected among the participants of Paris+20 to be part of the official French delegation at Rio+20

and to represent young people there as well as to present the results of their simulations, alongside members of CliMates.

IDDRI and the Sciences Po Sustainable Development Chair hope to continue to test new techniques for negotiating and representing the issues, as well as to show that research and teaching can be done differently. In this respect, the FORCAST project<sup>3</sup> (training on the analysis of science and technology through controversies mapping), set up by Sciences Po and involving 14 partner establishments, will provide support over 8 years for 37 training projects aimed at using cutting edge digital tools to monitor the scientific or technological controversies that the students will be mapping. The educational objectives are to help students from the exact sciences and from human and social sciences to understand how scientific knowledge is developed and to train them in digital exploration methods.

In 2012, IDDRI and Sciences Po also tasked Look at Sciences with producing a 38-minute video going back over the COP RW experience and showing its emotional intensity. A 52-minute documentary was also produced (entitled “*Qui pour sauver le climat ?*”, or Who can save the climate?) and shown on the French channel France 5. Based on videos, interviews and also research on the simulation by the Sciences Po École des Arts Politiques (SPEAP), IDDRI and Sciences Po organised a public conference (in June 2012) and two workshops for researchers in the theory of international negotiation (one in San Diego in April and the other at Sciences Po in December 2012) in order to take stock of what the COP RW simulation experiment contributes to this line of research, but also to the negotiators. The latter are currently seeking innovative ideas to prepare for the Conference of the Parties to the Convention on Climate Change in 2015, which is expected to be held in France, by supplementing the formal negotiating agenda with a series of parallel meetings between the actors. ■

1. <http://www.studentclimates.org/>

2. <http://mycityplus20.com>

3. <http://forccast.hypotheses.org/>

# What future for growth?

Since the 1970s, and even more so since the 2007 financial crisis, many industrialised countries have been facing low economic growth. The environmental unsustainability of this growth is an increasing concern, and environmental protection is seen alternately as driving or curbing economic growth, which is still considered as the main source of prosperity.

The aim of the New Prosperity programme is to inform the dual question of the future of growth and its linkages with prosperity. It is intended to be exploratory and multi-disciplinary. Its goal is to produce analyses of these issues, to identify new avenues for research, and to validate their true political relevance. The programme focuses on four priority areas.

## Growth and prosperity

The average growth rate in OECD countries has been falling steadily over the last 40 years. Each country has its own “ideal culprit” to explain this situation, and generally hopes for a return to higher growth so that the “obstacle” can be removed. Can we reasonably share this hope? Can we easily reject the scenario of economic stagnation, or even of continuing decline in growth rates? What implications would this have for the functioning of our economies and societies, especially in terms of prosperity? Which policies and institutions are needed to make them resilient in the face of economic uncertainty, to “free” them from this need for growth?

## Lessons from the past for the green industrial revolution

To reduce environmental degradation and particularly its economic impacts, it is essential to adopt new “green” technologies. Can these—like steam engines or electricity in their time—trigger a new wave of growth? This is the hope expressed by some authors who advocate a “green industrial revolution”. Historical analysis must be used to identify the conditions (especially the scope and nature of technological and institutional changes) required for this hope to become reality.

## Green industry and globalisation

The development of green industry cannot be removed from the context of globalisation in which it arises or from its governance framework. Indeed, there is a risk that the industrialised economies will reduce their support for research and for the promotion of green industry if the associated benefits primarily concern countries with low labour and production costs. Do we then risk industrial immobilism and under-investment in green innovation? Is globalisation an opportunity or a risk for innovation in eco-technologies? Which industrial and trade strategies and what type of governance of globalisation are now needed for the advent of green industry?

## Social innovation: functionality economy

The ecological transition is dependent on innovations that are not only technological, but also social. Product-service systems, for example, in which goods manufacturers are replaced by service providers, assume a radical reorganisation of production, distribution and consumption. How will such an innovation contribute to the economic fabric, to growth and to its environmental sustainability? Can product-service systems go beyond a few success stories frequently cited and assume a macro-economic dimension? What repercussions will they have on the creation of value and its distribution between companies, public services and users? What about the rebound effect, when product-service systems make productivity gains possible?

Last year was devoted to the intellectual design of the New Prosperity programme, while 2013 will define its research priorities through a number of seminars and workshops conducted with different partners (research centres, foundations, etc.) and an international conference involving French and international speakers and members of the French government. ■

## The importance of participating in Rio+20

In July 2002, in one of its first publications entitled “Is it worth going to Johannesburg?”, IDDRI stressed the need to take part in this kind of international conference in order to: obtain “the clear support of the international community for the multilateral system, even if this system needs to be reformed”; to foster “the integration of sustainable development goals into development strategies” as “the best way of reducing international imbalances and tackling inequality and poverty”; and to “define a global framework capable of promoting private initiatives and new cooperation between non-governmental actors”. The need to contribute to Rio+20 was even greater given that, where Johannesburg had provided a progress report on the implementation of Agenda 21, Rio+20 was intended to give fresh impetus to the definition of a common strategic framework for the international community, structured around two official themes: the governance of sustainable development and the green economy.

Twenty years later, the lack of quantified objectives and of an effective monitoring body impede the implementation of sustainable development,<sup>1</sup> and this is why Rio+20 was the opportunity to call for governments to live up to their collective responsibilities.<sup>2</sup> Ahead of the conference, IDDRI organised a workshop for international experts on global environmental governance at the Conseil Economique, Social et Environnemental (CESE) in Paris, which highlighted the need to take into account changes in the international system and in power relations since 1992, and to define an agenda aimed at transforming our development paradigm.<sup>3</sup> In order to further mobilise civil society, IDDRI organised two public conferences: the first was a high-level conference<sup>4</sup> with the UN Executive Coordinator of Rio+20 and the Brazilian Ambassador for climate change negotiations; the

second, based on IDDRI’s research, analysed 20 years of sustainable development against the targets set in 1992, and defined goals for Rio+20.<sup>5</sup>

IDDRI focused on two subjects in order to contribute to the draft negotiating text: the agenda of ocean management<sup>6</sup> and science-policy interfaces.<sup>7</sup>

At the initiative of Brazil, UNDP led an online dialogue with citizens in order to propose a number of recommendations. In charge of the topic “Sustainable Development as an Answer to the Economic and Financial Crises”, Laurence Tubiana took part in the plenary session of these dialogues in Rio, which were held after an agreement had been reached on the final text, thereby making it impossible for the dialogues to influence this text.

But Rio was also an opportunity to promote IDDRI’s research. The team thus took part in many side events on agriculture, oceans, the green economy and energy-climate issues, as well as in the annual meeting of the International Society for Ecological Economics.<sup>8</sup> Participation in this type of conference also helps IDDRI’s researchers to better understand and observe the challenges as well as relations between stakeholders in order to propose more relevant analyses and to identify the key actors in negotiations. It is also an opportunity to contribute to the creation of networks, such as the Sustainable Development Solutions Network,<sup>9</sup> of which IDDRI is a member. ■

1. Chabason, L. (2011). “Twenty years on from Rio, development is still far from sustainable”, IDDRI, *Working Papers* N°12/11.

2. Tubiana, L. *et al.* (2012). “Now is the Time! Why “Rio+20” must succeed”.

3. “What reasonable ambition for Rio+20?”, IDDRI, *Policy Briefs* N°03/12..

4. “Rio+ 20 - Sustainable development challenged by globalisation”, 30 January 2012, Paris.

5. “What ambition for Rio+20?”, 23 March 2012, Paris.

6. Billé, R., Druel, E., Rochette, J. (2011). “Advancing the Oceans agenda at Rio+20: where we must go”, IDDRI, *Policy Briefs* N°05/11

7. Treyer, S., Billé, R., Chabason, L., Magnan, A. (2012). “Powerful International Science-Policy Interfaces for Sustainable Development”, IDDRI, *Policy Briefs* N°06/12.

8. <http://www.isec2012.org/>

9. <http://unsdsn.org/>

## Exiting the European crisis and the green economy

The management of the economic crisis and of its political consequences continued to dominate the European agenda in 2012, with the seriousness of this crisis and its effects on employment putting the energy and environmental transitions on the back burner. But beyond its cyclical causes and institutional aspects, the structural nature of the crisis has also stimulated new discussions on the reasons the European growth model is running out of steam and on ways to address this in the long term. In this context, IDDRI has worked to contribute to the general economic and political debate in three ways:

*By determining the role of the depletion of energy resources in the current crisis.* While, in the United States, the high, volatile oil prices contributed to the onset of the financial crisis and also amplified it, in Europe, energy resources have played a smaller part in the crisis. However, high energy intensity in the peripheral eurozone countries and their dependence on energy imports have contributed to increasing their structural trade deficit.

*By showing how “environmental” policies could help to build a long-term response to this crisis.* The current crisis is not primarily one of resources. But there can be no lasting solution to it unless environmental factors are taken into account. Indeed, this crisis hides another one, with potentially far greater economic and human impacts: the environmental—and particularly climate—crisis. And in the long term, the response to these two crises is the same: innovation. Directed innovation, to use natural resources more efficiently, reduce greenhouse gas emissions and protect the environment, would set Europe on a potentially higher growth path. Environmental taxation is a necessary but not sufficient condition for this directed innovation. But the introduction of a carbon price, if it is partially offset by a reduction in the tax burden on labour or business, would make Europe more competitive.

*By assessing to what extent, and under what conditions, investment in “green” infrastructure could contribute in the short term to boosting growth and employment through investment.* The efficient use of resources and the reduction of greenhouse gas emissions may well be the conditions for positive

growth in the long term, but the short term cannot be ignored. Indeed, although in the long term the benefits of the energy and environmental transition largely outweigh the costs, in the short term, high investment costs are involved. The apparent contradiction between short- and long-term approaches is not specific to environmental issues, although it is particularly evident in their case. Government deficits cannot be curbed solely by higher taxes and lower spending, which, if excessive, stifle growth, reduce revenue and increase deficits. It is the vicious circle of austerity that must be broken, by means of structural reforms and measures to support investment in order to sustain growth. Investment in “green” infrastructure (energy, transport, building, etc.) represents a significant share of European GDP, has high employment potential and can be deployed rapidly; it can therefore help to boost growth and employment in the short term.

As for IDDRI, discussions on recovery from the crisis in the European Union are embodied in numerous projects, which have resulted in several concrete proposals, some of which are taken up in European policies: analysis of the “environmental” drivers of the crisis and proposals for a “sustainable” solution to the crisis with the macroeconomists of the London School of Economics,<sup>1</sup> followed by a media campaign in France (*Le Monde*), Germany (*Financial Times Deutschland*), Europe (Vox EU) and worldwide (Project Syndicate); a project financed by the German Environment Ministry on the impact of investment in the green economy on growth and green project bonds;<sup>2</sup> a project financed by HSBC Bank on the consequences of the new financial standards (Basel III for bank, Solvency II for insurance companies) in terms of the capacity of banks to finance the transition to a green economy; and participation in research by the circle of economists surrounding the European Commissioner Janez Potocnik on the recapitalisation of the European Investment Bank (EIB). ■

1. Spencer, T., Chancel, L., Guérin, E. (2012). “Exiting the crisis in the right direction: A sustainable and shared prosperity plan for Europe”, IDDRI, *Working Papers* N°09/12.

2. Spencer, T., Chancel, L., Guérin, E. (2012). “Green investments in a European Growth Package”, IDDRI, *Working Papers* N°11/12.

## Which policies for environmental migration?

**T**oday, some 210 million people live in a different country from the one in which they were born. This figure represents about 3% of the world population, and has more than doubled over the last 25 years. Added to this figure are all those who migrate within their own country: it is estimated that there are currently 740 million internal migrants in the world. If these two figures are added together, we find that one in every seven people in the world does not live in their place of birth. Migration is a particularly complex social phenomenon, and is generated by a number of factors, whether political, economic or social. To a growing extent, in recent years the weight of environmental factors has been added to these other factors. Every year, several million people are displaced because of damage to their environment, whether this damage is sudden—such as natural disasters—or more progressive, such as many impacts associated with climate change.

For several years, IDDRI has been pursuing an approach aimed at both better understanding the determinants of migration in the face of environmental shocks, and at working with international organisations to better integrate these migrants into public policies. In February in Dhaka (Bangladesh), IDDRI worked with the Centre for Sustainable Development (CSD) to organise a writing workshop with local researchers, aimed at documenting environmental migration in one of the most climate-vulnerable countries in the world. This research is soon to be published in a special edition of the *Asia Pacific Migration Journal*. In March, IDDRI organised a session on this issue during the “Planet Under Pressure” conference in London (United Kingdom), the major conference of the year in the field of environmental governance. In June, in partnership with the Agence Française de Développement (AFD) and the World Bank, IDDRI organised a conference on environmental migration in North Africa and the Middle East, a region where little attention has been given to this issue. Finally, October saw the annual meeting of the

COST network, a European network on environmental migration, within which IDDRI represents France. During this meeting, an exploratory workshop was held on the economics of environmental migration, a key issue for which research is still in its infancy.

The year 2012 was also marked by the launch of the Nansen Initiative by the Norwegian and Swiss governments, aimed at setting up an international programme for the protection of people forced to move abroad because of natural disasters. IDDRI is a member of its consultative committee. Those who advocate this initiative hope it will contribute to advancing the adoption of an international text.

In late 2012, IDDRI also worked with IOM to publish the new edition of “The State of Environmental Migration”, an overview of environmental migration throughout the world, based on contributions from students of the Sciences Po Paris School of International Affairs (PSIA).

In 2013, IDDRI’s work will gather further momentum: as part of the MOBGLOB (Global mobility and migration governance) project coordinated by CERI (Sciences Po) and financed by the Agence nationale de la recherche (ANR), which will examine the global governance of migration, IDDRI will organise an experimental, forward-looking workshop on freedom of movement in the world; the MECLEP project, coordinated by IOM and financed by the European Commission, is aimed at conducting in-depth empirical studies, which for the first time will involve a quantitative dimension—IDDRI will coordinate scientific research for the project. ■



# What projects for transforming agriculture?

National and international discussions on the future of agriculture and food agree on the fact that the green revolution is over. In this context, the 2012 edition of *A Planet for Life—Towards Agricultural Change?* takes stock of the different reasons, whether social (such as the employment challenge in Africa), economic (the viability of developing small farms) or environmental (the sector's dependence on fossil fuels and on ecosystems that have been weakened by degradations partly linked to agriculture itself), for the need to define a new modernisation project for agriculture and for the whole food system, in other words one that also takes into account the obstacles and leverage for change found upstream of the primary sector (providers of knowledge or inputs) and downstream of it (processors, distributors and consumers). Different transformation projects have emerged: from agroecology, which calls for an overhaul of the food system to better integrate natural cycles and balances, but also to ensure greater autonomy and subsidiarity, to the new green revolution, which renews the model of the last 40 years by seeking maximum efficiency in the use of chemical inputs. Agriculture needs to change, everybody agrees on this, but in which direction?

In 2012, the concept of “sustainable intensification” gained currency. This clearly reflects the current predominant framing of agricultural and food issues, which underlines the top priority of producing more, everywhere, in order to ensure global food balances, hence the insistence on the notion of intensification. However, this priority therefore puts issues of access to food on a back-burner, despite them being recognised as equally essential to food security. This framing also reflects the concentration of the environmental question on the concept of resource use efficiency, which also converges towards a focus on the sole objective of increasing yields, while the efficiency gains obtained provide no guarantee that total pressure on the environment will not continue to increase, whether for biodiversity or for water quality, for example. This framing also implicitly assumes that an increase in yields is a reliable indicator of an improvement in the socio-economic situation of farmers, which seems reasonable in sub-Saharan

Africa, where productivity levels are currently very low, but is more controversial elsewhere.

However, this framing is also considered by many experts and actors as a way to avoid questioning the technological package of the green revolution and the structure of the organisations that supported it. Is it really useful to compare this model of continuity to alternative models such as that of agroecology? Would it be preferable to call for real “systemic change”? In doing so, is there not the danger that the debate will be unnecessarily polarised on an opposition that could appear as a lower priority than the plea for renewed

## Water scarcity, a challenge for food security and agricultural change

The constraints on water resources, in both developed and developing countries, are one of the major challenges for sustainable development. A report produced by IDDRI for the OECD (“Prospective on agricultural water demand”), and the section entitled “Water and Food Security” in *Déméter 2013: Economy and Agricultural Strategies* (coordinated by IDDRI and the Foundation for World Agriculture and Rurality) identify the eminently political dimension of this challenge—that of the inevitable sharing of a scarce resource—which calls for a re-examination of development models and regulatory mechanisms. This was also the issue developed in the 2012 edition of the European Report on Development. In 2012, these reflections particularly marked the World Water Forum in Marseille, through the concept of the Gordian knot (or “nexus”) of water, food and energy. Thus defined as a challenge for the security of the provision of basic services (food, energy, safe water), water scarcity could be a powerful argument for rethinking regional development models and business models. The European Commission’s “A resource-efficient Europe” strategy sets out to anchor the environmental agenda in this perspective, in a context of structural economic crisis. Whether or not this resource scarcity argument has the power to convince nevertheless remains to be determined.

## Transforming food systems

How can food systems be made more sustainable? Which public policies and private initiatives should be implemented with a view to rethinking production, distribution and consumption systems? What drivers for change in the agri-food system exist to satisfy the needs and expectations of the different actors in the food sector, while ensuring sustainability?

At the European level, during a workshop organised in November 2012 at the European Commission in which IDDRI took part, the need to develop a sustainable European food policy aimed at using resources efficiently – and thereby reducing losses and waste – was highlighted. In particular, this policy should be based on the diversity of production models and on innovation in alternative models.

While experimental environmental labelling processes are underway in France in accordance with the Grenelle Acts, IDDRI and the New Zealand Embassy organised two workshops in April and October 2012 on the way in which communicating to consumers information about the environmental impact of products may lead the whole sector towards greater sustainability. These workshops, which brought together actors with opposing views, helped to identify areas of convergence and divergence, dealing particularly with the international governance of these private initiatives, which are often implemented by the distribution sector, but also with incentives for their development. Market power seems to play a key role in transforming

food systems: but what is the role of public power? Relying on the dominant actors to steer the sectors towards a sustainable model? Or protecting the smallest actors who opt for sustainability processes in an attempt to differentiate themselves?

Finally, at the level of the local authorities and regions, the participants in the Hungry City conference (December 2012, co-organised by IDDRI) identified a number of emerging initiatives to create new local food policies that aim to achieve autonomy. The establishment of short supply chains between producers and consumers appears particularly as a positive step towards the modernisation of food systems. However, are these initiatives only deployed for “niche markets”, or can they initiate more global, systemic changes?

Alongside this research, and as part of the activities of the Sciences Po Sustainable Development Centre and its partner, the French Agency for Food, Environmental and Occupational Health and Safety (ANSES), IDDRI organised cross-cutting discussions on the role of health and safety mechanisms in achieving the sustainable transformation of agri-food industries. How do alternative systems and global supply chains deal with health and safety challenges? This issue of the new risks and requirements of monitoring and regulation is a priority research area, and is at the heart of the goal of modernising food systems and making them more sustainable.

investment in agriculture? In 2012, IDDRI worked to show why it is now legitimate to plan public policy or agricultural investment orientations in terms of path changes, referring to both the European context and the African context. Two papers<sup>1</sup> thus illustrate the relevance of an analysis in terms of transition, since the stability of the socio-technical regime in place only allows for marginal adjustments, while other alternative and emerging models do not have the same opportunities to prove themselves.

It appears necessary to diversify practices, systems and models, with a view to actively ensuring all options are kept open (which passive neutrality with regard to models would be far from achieving), but also because diversity at all levels reasonably appears as an advantage in the face of the environmental and social challenges of

the coming period. This analysis thus examines the main strategic decisions regarding agriculture and food at all levels of the system. How can a research policy be developed (such as those of the Consultative Group on International Agricultural Research, CGIAR, or the European Horizon 2020 strategy) that gives the different innovation pathways every chance of success? How can the portfolio of development assistance projects be managed in such a context? What are the tools for action available to agricultural policies to facilitate the transition or, at least, to explore the range of potentially relevant models? How can we avoid an irreversible loss of diversity (whether in terms of practices, know-how, agrobiodiversity or biodiversity in general)?

IDDRI thus took these questions and this reconsideration of a false consensus on the concept of sustainable intensification to the main political forums in which this issue was discussed. IDDRI's framework for action within the highly specialised circle of the reform of international agricultural

1. Egal, C. (2012). « Sécurité alimentaire en Afrique sub-saharienne : faut-il une rupture dans le modèle agricole ? », IDDRI, *Policy Briefs* N°04/12, and Gravey, V. (2012). “Moving away from business as usual in agriculture”, IDDRI, *Working Papers* N°10/12.

research for development (*see box* “Agricultural foresight and international agricultural research”, p.17) has been established since 2010. In 2012, IDDRI increased its visibility in the debate on European policies and in global agricultural discussions.

At the European level (*see highlight* “Sustainability and competitiveness: what public policies for agriculture in Europe?”, p. 18), IDDRI put itself in a position not only to be invited to discuss the Commission’s proposals (on the reform of the Common Agricultural Policy [CAP] and on the definition of a sustainable food policy), but also to invite European actors in the debate on the CAP to participate in strategic discussions to thoroughly rethink ways to integrate environmental issues into sectoral agricultural policy, after the probable failure of proposals on greening as an incentive for systemic change. IDDRI thus laid the groundwork to ensure a real ability to contribute to European food systems, based on analyses focusing on a forward-looking understanding of pathways for transforming agricultural systems and on a study of the strategic opportunities or constraints of the global context (trade and environmental negotiations).

IDDRI’s involvement in the European debate is also a condition for being able to contribute in a relevant and legitimate manner to international coordination issues and to the major multilateral forums. The ability to exchange with the actors who, in other parts of the world, are working to steer food systems onto more sustainable paths is also the basis for building trust between global actors. For this purpose, IDDRI helped to clarify agricultural policy changes in different regions by producing papers,<sup>2</sup> organising events (lessons from India’s experience) or comparing different experiences (in *A Planet for Life*, between the reconstruction of Latin American agricultural policies and the comparison of European and American policies).

IDDRI also took advantage of the Rio+20 conference to get involved in the global networks and forums on agriculture, and took part in numerous events with actors such as FAO (Food and Agriculture Organization of the United Nations) and IFOAM (International Federation of Organic Agriculture Movements). Although networking and talks proved productive at

Rio+20, the same cannot be said of the negotiations themselves. Like most global issues, food security was the subject of a specific section in the negotiated text. It appeared particularly important that other than reasserting goals for food security, this text should not be the opportunity to establish as a standard one of the models that is currently disputed, as being the only or best means of achieving this. Although the text remains ambiguous and seems to correspond to the sustainable intensification framing, it is not locked into the pursuit of the technical model of the green revolution. It is striking to note that the Dialogue Days organised with civil society at the initiative of the Brazilian Presidency produced recommendations that are much more ambitious in the way they place consumers – and no longer just producers – at the heart of the issue of food security and sustainable food systems.

Furthermore, the final text mentions the fact that the Committee on World Food Security (CFS), set up under FAO and the United Nations General Assembly, could be responsible for organising national assessments of sustainable

## Agricultural foresight and international agricultural research

International agricultural research is at the heart of the debate on the future of agriculture and of food systems. The governance of this research is undergoing major changes in order to give greater consideration to the demands expressed by farmers, especially in developing countries. The year 2012 was marked by the organisation of the 2nd Global Conference on Agricultural Research for Development (GCARD) in Punta del Este in Uruguay, where IDDRI helped to organise a workshop on foresight. For the participants to the conference, foresight proved a real but ambiguous success, in view of the conflicts and power struggles over the use of this term. However, serious attention must be given to these operational processes, which aim to make foresight a tool for ensuring global participatory discussions on how research can influence socio-technical change and innovation in agriculture. Following this conference, IDDRI is helping to organise the Forward-Thinking Platform on the different approaches to foresight to identify the convergences and divergences between specialists in order to increase the relevance and impact of international research.

2. Schwoob, M.-H. (2012). « Sécurité alimentaire en Chine : quels arbitrages ? Quels acteurs ? », IDDRI, *Working Papers* N°22/12, and Word, J. (2012). “Greening the Farm Bill: how the budget deficit and the health crisis can support green policy”, IDDRI, *Working Papers* N°12/12.

## Sustainability and competitiveness: what public policies for agriculture in Europe?

Despite the context of disinvestment in agriculture at the global scale, agricultural policies, both national and regional, are still strong tools for the strategic planning of agricultural production and practices. While the negotiations on the reform of the CAP seem to be focusing on minimising constraints to maximise production instead of defining incentive measures for transforming production models, IDDRI has continued its research at the national and European levels on the issue of “how to produce differently”.

During an international conference organised in February 2012 by the Sciences Po’s Sustainable Development Chair and its partner Proléa, several French and European experts discussed the outlines of agricultural policies that would take into account environmental issues. Stéphane Le Foll, then a Member of the European Parliament, called for a systemic change in order to move towards less energy or pesticide-intensive agricultural production models, while still ensuring sufficient production and competitiveness. Once appointed French Minister of Agriculture, he launched two far-reaching operations to identify tools for developing new agricultural models in order to prepare the future law on agriculture, agri-food and forestry, planned for late 2013. Within the framework of the mission entrusted to Marion Guillou, IDDRI is participating in a working group on the transition to more effective agricultural practices and sectors.

IDDRI also conveyed the message of the need for a systemic change to ensure food security in Europe and the rest of the world during a conference organised by the European Commission in Brussels in July 2012 on “The CAP towards 2020”. This conference provided civil society with a forum to discuss the proposals for CAP reform adopted by the Commission in 2011. In a similar spirit, IDDRI organised a workshop in Brussels around the DG Environment and actors from European civil society focusing on integrating biodiversity into the CAP. This issue is problematic for both the proposed “greening” of the first pillar and the definition of objectives for the second pillar. IDDRI’s partnership with the network of experts from the European Forum on Nature Conservation and Pastoralism has led to the production of two contributions to the debate, which were presented in Brussels. They focused on obstacles and leverage at the international level for the inclusion of biodiversity in the CAP and on the key role of livestock farming and permanent pastures for biodiversity protection. One of the conclusions of the workshop particularly highlighted the need to produce an alternative argument to the discourse on the sustainable intensification of agricultural production, thereby questioning the urgency of producing more in Europe. The importance of this debate confirms the value for IDDRI of maintaining agricultural policy as one of its key focal areas.

agricultural production and food security. The CFS seems to be a particularly interesting forum for democratic experiments at the global level, to facilitate the transition of our food systems but also the construction of international cooperation, but we should have no illusions about its influence faced with the challenges of international trade. These issues concerning the global governance of food security will be one of IDDRI’s research areas in 2013, which could take inspiration from the creative impulse on this subject shown by a

group of Sciences Po students, who prepared with great care a series of innovative recommendations for the conference “The end of hunger by 2050?” (May 2012), co-organised by IDDRI, INRA and CIRAD with Universciences. Transparency, democratisation, integrating power relations and managing the transition: the energy of these proposals gives hope of recovering the ability to act in order to change our food systems, and paves the way for IDDRI’s forthcoming research on this subject. ■

# Ocean governance and funding: the challenges of biodiversity

At the international level, 2012 was particularly marked by the 11<sup>th</sup> Conference of the Parties (COP) to the Convention on Biological Diversity (CBD), which was held in Hyderabad (India). COP 11 was presented as a return to normalcy<sup>1</sup> after the somewhat unusual publicity surrounding the previous conference in Nagoya in 2010, and was the opportunity to take stock of the “Nagoya legacy”. This legacy remained a focal point for IDDRI throughout 2012, in particular with its continued contribution to the analysis of issues linked to the future entry into force of the Nagoya Protocol on Access and Benefit Sharing (*see highlight* “Access and benefit sharing at the heart of complex international negotiations”, p. 20). More broadly, IDDRI focused its efforts on two key areas of the Strategic Plan and its 20 objectives for 2020 (known as the Aichi Targets): economic approaches to biodiversity and ocean and coastal zone management.

For the first of these areas, IDDRI put the finishing touches to its research project on the use of economic valuations of biodiversity (*see highlight* “Questioning the use of economic valuations of biodiversity”, p. 22), with several publications still expected in 2013. In addition, the INVALUABLE project began in 2012, coordinated by IDDRI within the framework of the ERA-NET Biodiversa programme. Bringing together some 10 European partners, its aim is to study different aspects of so-called “market-based” instruments for biodiversity, including their theoretical basis, their emergence in the doctrine, their effects on actors’ motivations and public policy, and their environmental and social impacts. Payment for ecosystem services mechanisms, in all their diversity, are given special attention by IDDRI, which conducted an in-depth case study in late 2012 on the island of Java in Indonesia.

It is now more critical than ever to better understand what these “market-based” or “innovative” instruments actually are, as they are at the heart of what remains the “weakest link” of the Nagoya

## Taking action against ocean acidification

Ocean acidification is a threat to marine biodiversity. It has or will have a direct impact on certain sectors of activity (fishing, aquaculture, tourism, etc.), as well as indirect effects on large parts of the world economy. It is therefore important to study the options available to us to address this problem, from two angles: first, can acidification make a difference to the climate negotiations? Second, is tackling ocean acidification limited to the control of atmospheric CO<sub>2</sub> concentration?

In order to investigate these cross-disciplinary questions at the science-policy interface, IDDRI has coordinated an international team of experts from different backgrounds (the Stanford Center for Ocean Solutions, CNRS, IUCN, etc.), which has provided some operational answers in four different directions: preventing acidification from happening; strengthening ecosystem resilience; adapting human activities; and repairing acidification that has already occurred. The results, published in a policy brief,<sup>1</sup> were also discussed in public during a session of the Sustainable Development and Environment Economy Seminar (SDEES).<sup>2</sup>

1. Billé, R., Kelly, R., Biastoch, A., Harrould-Kolieb, E., Herr, D., Joos, F., Kroeker, K., Laffoley, D., Oschlies, A., Gattuso, J.-P. (2012). “Ocean acidification – What can we do?”, IDDRI *Policy Briefs* N°17/12.

2. “Taking action against ocean acidification”, session of the Sustainable Development and Environmental Economics Seminar, 18 December 2012, Paris.

deal: the strategy for resource mobilisation.<sup>2</sup> The last minute commitment made in Hyderabad to double international financial flows for biodiversity protection by 2015 relative to the 2006-2010 average is largely based on the hope that the additional sums to be allocated to biodiversity in the coming years will not be taken from the budgets of donor States – most of which are in crisis –, but generated by other mechanisms, whose potential is highly uncertain at present. But finding other, faster means of filling the bottomless pit of the hundreds of billions of euros allocated every year to economic activities harmful to biodiversity is not the solution. An emblematic objective of the Aichi Targets, the elimination of these harmful

1. Billé, R., Chiarolla, C., Druel, E., Pirard, R., Rochette, J. (2012). “The 11<sup>th</sup> Conference of the Parties to the CBD: a return to normalcy in Hyderabad?”, IDDRI, *Policy Briefs* N°14/12.

2. Lapeyre, R., Pirard, R., Kleitz, G. (2012). “Resource Mobilisation for Aichi Targets: ambiguous lessons from research on market-based instruments”, IDDRI, *Policy Briefs* N°15/12.

## Access and benefit sharing at the heart of complex international negotiations

Based on solid expertise in international biodiversity governance issues, and more specifically in those relating to access and benefit sharing (ABS) for genetic resources and associated traditional knowledge, IDDRI has helped to identify the challenges of commitments made through the adoption of the Nagoya Protocol during the 10th Conference of the Parties to the Convention on Biological Diversity (CBD) in October 2010, and to facilitate its implementation. Thus, within the framework of the 11th Conference of the Parties (COP 11) to the CBD, which was held in Hyderabad (India) in October 2012,<sup>1</sup> IDDRI organised a side event in partnership with L'Oréal, entitled "Making ABS work for biodiversity conservation". An in-depth study on this subject has also been produced, and is expected to be published in 2013.

Moreover, with the support of the French Ministry of Foreign Affairs, in 2012 IDDRI launched a vast analysis of the challenges for the negotiations on access and benefit sharing in the context of the future entry into force of the Nagoya Protocol.<sup>2</sup> The aim

of the study is to take stock of the ABS negotiations underway or planned and to explore their relationships with the negotiations on intellectual property.

With regard to areas beyond national jurisdiction, bioprospecting had not been envisaged when the United Nations Convention on the Law of the Sea (UNCLOS) was drafted. In accordance with the principle of the freedom of scientific research, the sharing of benefits arising from the exploitation of marine genetic resources (MGRs) is therefore still not regulated at the international level. Historically, and in view of the ABS norms now included in the CBD and the Nagoya Protocol, this situation is seen as inequitable and unjust, particularly for countries whose capacity to undertake oceanographic and marine bioprospecting activities is limited or inexistent. In order to address this shortfall, one of the options being studied is the development of a new international instrument under the aegis of UNCLOS, which would include provisions on the sharing of benefits arising from the use of MGRs. In 2012, IDDRI contributed to the Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction by providing its unique expertise combining the law of the sea, ABS and intellectual property rights.

1. Billé, R., Chiarolla, C., Druel, E., Pirard, R., Rochette, J. (2012). "The 11<sup>th</sup> Conference of the Parties to the CBD: a return to normalcy in Hyderabad?", IDDRI, *Policy Briefs* N°14/12.

2. Chiarolla, C. (2013, forthcoming). « Relations et enjeux des négociations relatives à l'accès aux ressources génétiques et connaissances traditionnelles, et au partage des avantages, dans le contexte du Protocole de Nagoya », IDDRI, *Studies*.

subsidies was the subject of the annual conference that IDDRI co-organises with the Fondation d'Entreprise Hermès.<sup>3</sup>

On the second point, the current international attention to ocean and coastal zone management underpins one of IDDRI's strategic choices, which has been one of its priority areas for several years. The oceans and coasts are an exceptional source of biodiversity that is currently under increasing threat from the range and intensity of human activity. The concentration of societies and economic activities in coastal areas has a major impact on the integrity of marine ecosystems and on all associated ecosystem services. At the same time, the ocean frontiers are being continuously pushed back, and the exploitation of marine resources, whether fishery, mineral or genetic, is becoming ever more intense, distant and deep. Yet

both at sea and on land, at the global and local levels, the responses provided by the international community remain inadequate to guarantee their conservation and sustainable use.

The Biodiversity programme continued its efforts to support the implementation of integrated coastal zone management (ICZM) in the Mediterranean and in the South-West Indian Ocean. Its research has revealed the decisive nature not only of the content of the texts adopted at the regional level,<sup>4</sup> but also of their normative scope, of implementation monitoring or even enforcement mechanisms, and of the way in which States and actors take hold of them.<sup>5</sup> IDDRI also raised the key question of institutional, organisational and

4. Rochette, J., Wemaëre, M., Billé, R., du Puy-Montbrun, G. (2012). "A contribution to the interpretation of legal aspects of the Protocol on Integrated Coastal Zone Management in the Mediterranean", UNEP, MAP, PAP/RAC.

5. Rochette, J., Billé, R. (2012). "ICZM Protocols to Regional Seas Conventions: What? Why? How?", *Marine Policy*, 36(2012): 977-984.

3. Pirard, R. (2012). "Policies against nature? Towards a reform of biodiversity harmful subsidies", IDDRI, *Policy Briefs* N°11/12.

individual implementation capacities,<sup>6</sup> analysed these and contributed to developing them<sup>7</sup> both at the regional level and in the States concerned. Having in particular facilitated, through its work as part of the ProtoGIZC project supported by the Mediterranean Action Plan and the French Ministry of Ecology, the ratification of the Protocol on ICZM in the Mediterranean by Croatia<sup>8</sup> and Montenegro, in 2012 IDDRI continued its activities to accompany States, especially Lebanon, on the path towards more sustainable coastal development.

But the major challenge for marine governance in 2012 was undoubtedly the protection of biodiversity in the high seas, which cover more than half of the Earth's surface. Based particularly on a partnership launched the previous year with the Agence des Aires Marines Protégées, IDDRI actively worked to analyse and influence the numerous international meetings, from Rio+20 to the United Nations General Assembly and Hyderabad,<sup>9</sup> that addressed the governance of areas beyond national jurisdiction. Indeed, Rio+20 drew political attention to the need to settle a debate that was becoming bogged down at the United Nations, that of whether or not it is necessary to launch international negotiations on a potential implementing agreement for the United Nations Convention on the Law of the Sea dealing specifically with the high seas. Although the international community did not answer this question in Rio, it did at least set a limit to its prevarications, since a decision must be made before the end of 2014. At the heart of a highly political and technical debate dealing with the four pillars of the package deal (marine protected areas, marine genetic resources, environmental impact assessments, and capacity building and technology transfer), IDDRI has published several reports and briefing notes. These have been used to inform the debates and to make proposals, particularly on the potential articulation of different levels of governance and the limitations inherent to each one. Special efforts have been made to draw all

## The need for better regulation of offshore exploitation

The recent accidents on offshore oil and gas platforms (Australia, Montara, 2009; United States, Deepwater Horizon, 2010; China, Penglai 19-3, 2011) have revealed the level of risk caused by drilling activities facing the marine and coastal environment. With the considerable development of deep and ultra-deepwater drilling, it is thus becoming urgent to strengthen the regulatory framework for these activities, which is currently deficient. With this in mind, in 2012 IDDRI launched the project "Towards an international regulation of offshore oil and gas exploitation",<sup>1</sup> which is aimed at informing international discussions and initiatives to regulate offshore activities and thereby limit their impacts on the marine environment. The first expert seminar<sup>2</sup> organised in March in Paris helped to identify scope for improvement in the international regime. In 2013, IDDRI will continue this research, working particularly with regional systems which, like in West Africa, are increasingly committing to the development of regulations aimed at preventing, reducing and controlling pollution from offshore drilling activities.

1. Rochette, J. (2012). "Towards an international regulation of offshore oil exploitation. Report of the expert workshop held at the Paris Oceanographic Institute on 30 March 2012", IDDRI, *Working Papers* N°15/12.

2. Supported by the Prince Albert II of Monaco Foundation, and the MAVA and FIBA Foundations.

the lessons possible from the successes and failures encountered by the initiatives taken at the regional level,<sup>10</sup> in the absence of this famous implementing agreement for which only a handful of States still fail to see the need. Helping to ensure the international discussions result in solutions that bring hope for this exceptionally rich biodiversity is of course one of IDDRI's key priorities for the next two years.

Finally, on the strength of its analyses and the legitimacy it has acquired in the fields of ICZM and the high seas, in 2012 IDDRI launched a new project focusing on the international regulation of offshore oil and gas drilling (*see box* "The need for better regulation of offshore exploitation", p. 21). It also coordinated an international summary exercise on ocean acidification (*see box* "Taking action against ocean acidification", p. 19), which mobilised ideas, tools and concepts derived from several of its programmes. ■

6. Rochette, J., Billé, R. (2013). "Bridging the gap between legal and institutional developments within regional seas frameworks", *The International Journal of Marine and Coastal Law*.

7. Rochette, J., Billé, R. (2012). "Strengthening the Western Indian Ocean regional seas framework: A review of potential modalities", Indian Ocean Commission/European Union/FFEM/IDDRI, *Studies* N°02/12.

8. Rochette, J., du Puy-Montbrun, G. (2012). "Analysis of the Croatian legal framework in relation to the provisions of the Protocol on ICZM in the Mediterranean", Split: PAP/RAC.

9. Druel, E. (2012). "Ecologically or Biologically Significant Marine Areas (EBSAs): the identification process under the Convention on Biological Diversity (CBD) and possible ways forward", IDDRI, *Working Papers* N°17/12.

10. Druel, E., Ricard, P., Rochette, J., Martinez, C. (2012). "Governance of marine biodiversity in areas beyond national jurisdiction at the regional level: filling the gaps and strengthening the framework for action", IDDRI, *Studies* N°04/12.

## Questioning the use of economic valuations of biodiversity

Is it truly pragmatic to develop economic valuations of biodiversity? This question remains curiously under-documented, while the methods of valuation have been the subject of an abundant literature for several decades.

In an attempt to answer this question, IDDRI, in association with AgroParisTech, Ecowhat and the University Pierre et Marie Curie, and with the support of the Fondation d'Entreprise Hermès, has launched a project to identify situations in which economic valuations of biodiversity have had a decisive influence on decisions. Focusing on a very small number of well known, emblematic cases at the international level, the project team has selected two of these. The study of the way in which economic valuations of biodiversity are used at the World Bank,<sup>1</sup> especially to help calculate the internal rate of return for projects, has produced a first surprise: these economic valuations, just like formal economic project analysis, often seem to play no significant role in decision making. In the second case, the aim was to verify to what extent the City of New York had effectively evaluated the benefits of preserving environmental services in the Catskills rural watershed, from where it obtains its water resources, and implemented a "preventive" payment for ecosystem services (PES), supposedly more profitable than the construction of a water treatment plant. An analysis of the literature available<sup>2</sup> in fact indicates (i) that New York did not really face an alternative between the loss of ecosystem services provided by its watershed and their conservation; (ii) that the decision was not based on a cost-effectiveness calculation, but on a broader reasoning whose economic terms were evident; and

finally (iii) that the strategy implemented only corresponds very partially to a PES.

Faced with these cases that are far from corroborating the expectations placed in economic valuations, a vast literature review has been conducted,<sup>3</sup> enabling the development of a synthetic typology of the uses envisaged by the authors, according to three broad categories: decisive valuation, i.e. for a specific decision (for example the cost-benefit analysis of a future infrastructure); technical valuation, for the adjustment of an instrument or a policy that has already been chosen (for example a payment for ecosystem services plan); and informative valuation, for decision making in general (for example research assessing the value of ecosystems services at the global scale). Next, the literature review revealed that the vast majority of authors make an evasive reference to a potential use, but do not deal with specific cases, nor do they truly analyse the issue of use. Finally, a set of assumptions has been made that could explain both the limited use that is made of economic valuations of biodiversity in practice, and the reasons experts show so little interest in this issue. One of the main findings of this study is that these valuations will have no real influence on decision making as long as they are conducted from a "supply-side" perspective, as is currently the case. If, on the contrary, they are produced in response to the specific and explicit requirements of actors grappling with particular decision making contexts, and if they use suitable valuation methods, they will then stand a chance of contributing to a better integration of biodiversity by public and private actors. The findings of the project, and in particular the typology of potential uses, should help these actors to better identify and express their needs.

1. Haddad, A. (2011). « L'utilisation de l'évaluation économique pour la décision des bailleurs de fonds de l'aide publique au développement, dans le domaine de l'environnement et de la biodiversité », AgroParisTech-Ecowhat-IDDRI.

2. Laurans, Y., Aoubid, S. (2012). « L'économie au secours de la biodiversité ? La légende des Catskills revisitée », IDDRI, *Working Papers* N°14/12.

3. Laurans, Y., Rankovic, A., Billé, R., Pirard, R., Mermet, L. (2013). "Actual use of ecosystem services valuation for decision-making: questioning a literature blindspot". *Journal of Environmental Management* 119(2013): 208-219.



# Creating international momentum for the climate

**D**espite a difficult economic context, 2012, the year of energy and climate, was particularly eventful and marked by intense discussions. There was a greater focus on the energy transition, however, than on tackling climate change, and the framework for these debates and initiatives was essentially national – at best regional – and not, or rarely international. These two trends create risks as well as opportunities. Specific negotiations at the national level on the share of the different energy sources in the energy mix or on ways of reducing energy consumption should help to connect climate policy discussions to realities on the ground. But these national debates also often divert attention away from the climate dimension, especially when they primarily deal with the possibility of exploiting non-conventional fossil resources.<sup>1</sup> Furthermore, the implementation of national strategies without international consultation means the potential benefits of cooperation cannot be taken into account.<sup>2</sup> This inevitably results in a lack of ambition in terms of emissions reductions.

It was within this context, which was strongly marked by the economic crisis, at least for the developed countries, and with the goal of better connecting national policies and international cooperation, that IDDRI developed its activities in 2012.

## The French debate on the energy transition

In France, 2012 saw the launch of a major public debate on the energy transition whose goals and challenges are not only environmental (combating climate change and reducing local pollution), but also economic (reducing our energy dependence, boosting competitiveness and creating jobs) and social (tackling energy poverty). Previously, IDDRI had only occasionally and marginally contributed to French discussions on energy and climate. But this debate is the opportunity, in addition to the involvement of some of its members in the official bodies, to participate fully, thanks to

the legitimacy and expertise IDDRI has acquired at the international and European levels.

Most of the activities on this subject will take place throughout 2013. But IDDRI has already set up the Energy Transition Club, which brings together private actors (industrial and financial sectors), public actors (the State and regional authorities) and experts. The aim of this Club is to provide a forum for discussion between its members on several sticking points of the energy transition (finance, sectors, governance, etc.), illustrated using examples taken from our European neighbours, and examined within the framework of a European energy transition.

## The EU Climate and Energy Package

In 2012, the European Union (EU) struggled to consolidate its current Climate and Energy Package, but talks have begun on the next package. The agreement reached on increasing

## Sovereign wealth funds: an opportunity for the green economy?

In 2008, 26 States and sovereign wealth funds signed voluntary agreements known as the “Santiago Principles” aimed at increasing transparency and strengthening the good governance of their investment strategies.<sup>1</sup> Reflecting the growing vitality of a form of State intervention in economic affairs, especially in the Middle East and Asia, sovereign wealth funds contain assets that amounted to some 3 000 billion dollars in 2011. Within the framework of discussions on the way in which this “State capitalism” can contribute to the ecological transition, IDDRI has published several articles<sup>2</sup> examining the potential role of these sovereign wealth funds, but also of public investment banks, national development banks and pension funds, in financing sustainability (green infrastructure, low-carbon energy production, etc.). This issue of long-term investment in green energy technologies was one that IDDRI addressed during the World Future Energy Summit, which took place in January 2013 in Abu Dhabi.

1. The arguments for (short-term competitiveness) or against (the environmental impact of hydraulic fracturing) generally overlook one essential component: the emissions associated with their exploitation.

2. Whether through economies of scale or learning effects.

1. <http://www.iwg-swf.org/pubs/fra/gaplistf.pdf>

2. Guérin, E. (2013). « Économie verte : l'enjeu des fonds souverains », in *Regards sur la Terre 2013*, Armand Colin, and Guérin, E. (2013). “Sovereign Wealth Funds: opportunity or threat for the green economy?”, IDDRI, *Working Papers* N°01/13.

## Strengthening the Franco-German cooperation on transition

At the interface between its French and European activities, in 2012 IDDRI continued to coordinate the French-German dialogue on the energy transition launched in 2011.<sup>1</sup>

This project began with a simple premise. Beyond the differences frequently highlighted, it is clear that France and Germany share the same desire to begin the energy transition and are facing common challenges: reducing dependence on fossil fuel imports; deploying a vast energy efficiency programme based on the refurbishment of existing buildings; substituting nuclear power, in full for Germany, and in part for France; and developing renewable energies.

In light of this observation, the Franco-German dialogue organised by IDDRI combines two approaches.

First, the exchange of experience and best practice. IDDRI has published several studies and contributions to the debate aimed at providing insights into specific instruments or putting the respective political strategies into context. This work has particularly focused on the comparison of tools and policies for energy efficiency improvements, finance models for the energy transition and the development of renewable energies.<sup>2</sup>

1. With the publication of the Global Chance-IDDRI report, « L'énergie en Allemagne et en France : une comparaison instructive » (2011) and the organisation of a seminar involving French and German experts.

2. Rüdinger, A. (2013, forthcoming). « Rénover plus pour dépenser moins. La rénovation thermique du résidentiel privé en France et en Allemagne :

Second, cooperation. IDDRI has made several proposals for cooperation between France and Germany, aimed at accelerating the energy transition in both countries and in Europe in general: industrial cooperation thanks to the creation of common research and competitiveness centres, especially on solar photovoltaics; financial cooperation, through a partnership agreement between the Caisse des Dépôts et Consignation (CDC) and the KfW; and economic cooperation, through a common green project bond, on offshore wind power or the cross-border power grid.

The 50th anniversary of the Elysée Treaty for Franco-German cooperation has been a political driver for the different forms of technological cooperation proposed by IDDRI and its partners<sup>3</sup> within the framework of this dialogue. Preparations for the summit gave rise to a number of discussions with the French and German authorities with a view to including certain proposals in the text of the official declaration. One particular event, organised in Berlin just after the summit and attended by around 40 officials, industry representatives and experts, launched this cooperation on energy efficiency. Others will follow in 2013, especially on renewable energies.

regards croisés sur les outils politiques et financiers », IDDRI.

Rüdinger, A. (2012). « L'impact de la sortie du nucléaire sur le tournant énergétique allemand : éléments d'analyse », IDDRI, *Working Papers* 05/12.

3. Including IASS Potsdam, DIW Berlin and the French-German Bureau de Coordination pour les Energies Renouvelables.

energy efficiency efforts, while it contains a certain number of new measures that are a step in the right direction, will undoubtedly not be enough to meet the 20% target that the EU has set itself. Renewable energy support policies are called into question by several Member States, because of budget constraints in these countries, but also due to initial errors in the design of these policies. And the multiple attempts to reinforce the carbon price signal produced by the European Union Emissions Trading System (EU ETS), after it had been weakened by the crisis, all ended in failure.

There is nevertheless an urgent need to strengthen the existing Climate and Energy Package and to extend it until 2030, in order to put the EU back on track to an energy and climate transition. But European reform efforts—especially for the carbon market—have so far been guilty of short-termism by unnecessarily opposing more stringent constraints in the short term and predictability in the medium term.<sup>3</sup> In this context, IDDRI took the decision

to launch discussions with other European think tanks in order to learn from the successes and failures of the existing Climate and Energy Package, and to make proposals for the next one. These discussions focus particularly on: improving coherence between the different objectives of the Climate and Energy Package (emissions reductions, renewable energy and energy efficiency); strengthening the Package through a real European policy on infrastructure and industry; and reforming the European energy market to make it more favourable to investment.

In 2012, IDDRI organised two seminars on this subject: one in Brussels with the Centre for European Policy Studies (CEPS), attended by representatives of several European Commission directorates (climate, energy, enterprise); and another in Paris attended by the representatives of several Member States (France, Germany, the United Kingdom and Poland).

3. Guérin, E., Spencer, T. (2011). "Strengthening the European Union

Climate and Energy Package - To build a low carbon, competitive and energy secure European Union", IDDRI, *Studies* N°04/11.

## Climate policies and macroeconomic rebalancing in China

In 2012 China, unlike Europe, was not affected by the crisis. But its development goes hand in hand with a number of negative impacts, and has shown worrying signs of going off track, in both social and environmental terms, and more recently in economic terms. The need for macroeconomic rebalancing, towards a development model that is less dependent on exports and public investment and more environmentally friendly at both the local and global levels, is now widely accepted, and the central government is actively working to achieve this, although much remains to be done. In this context, IDDRI has attempted to make a connection between the issue of reducing carbon intensity in the Chinese economy and that of its macroeconomic rebalancing (*see box* “The challenges of climate change for the Chinese economy”, p. 25). Indeed, while the reduction in public investment, which is sometimes considered excessive – especially in energy-intensive infrastructure –, could help to reduce carbon intensity, the increase in domestic consumption is a real challenge.

## International negotiations

At the international level, 2012 only produced some very small steps towards the future legally binding global agreement to be adopted in 2015 and implemented in 2020. The agreement reached in Doha, Qatar, does make some progress, but is largely inadequate: the second commitment period of the Kyoto Protocol has been adopted, but its effectiveness will be limited, as it will cover a smaller proportion (15%) of global emissions, since Japan and Canada have formally withdrawn from it; and discussions on the international financial architecture have continued to progress, but the Green Climate Fund is still just an empty shell.

In 2012, IDDRI’s activities in the field of international negotiations focused on the issue of financing. As part of a project with the Agence Française de Développement (AFD), and in cooperation with other financial institutions, multilateral (World Bank), regional (the Inter-American, Asian and African banks) and bilateral (JICA), IDDRI contributed to talks on the Green Climate Fund, with two main recommendations: the importance of intermediaries in the international financial architecture;<sup>4</sup> and the need to supplement support for investment with funding for public

4. Valadier, C. (2011). “Key lessons from international financing mechanisms for the Green Climate Fund”, IDDRI, *Working Papers* 18/11.

## The challenges of climate change for the Chinese economy

The research led by IDDRI on the need for macroeconomic rebalancing in China and the impact of this has taken shape in several projects and papers, which have been discussed with Chinese authorities and experts:<sup>1</sup> analysis of the challenges of the 12<sup>th</sup> Five-Year Plan, from the viewpoint of meeting the target of reducing carbon intensity by 40-45% by 2020 relative to 2005;<sup>2</sup> and analysis of past and future greenhouse gas emissions trajectories in China.<sup>3</sup> In addition, IDDRI has pursued and developed its more specific activities on pilot carbon emissions trading systems, which are under development in China, through work with the central government<sup>4</sup> and certain provinces or cities (Beijing, Shenzhen, etc.): lessons from the European emissions trading system for the establishment of pilot systems in China;<sup>5</sup> and specific recommendations on the establishment of a measurement and verification system.

1. Seminars organised with the National Development and Reform Commission (NDRC), the National Center for Climate Change Strategy and International Cooperation (NCCS), Tsinghua University and the Central University of Finance.

2. Guérin, E., Wang, X. (2012). “Mitigation targets and actions in China up to 2020”, IDDRI, *Working Papers* N°01/12.

3. Belleverat, E. (2012). “Which decarbonisation pathway for China? Insights from recent energy emissions scenarios”, IDDRI, *Working Papers* N°18/12.

4. Through cooperation with the State Information Center (SIC) and the Chinese Academy of Social Sciences (CASS).

5. Wang, X., Spencer, T. (2012). “Key challenges of EU ETS in 2012”, Chinese Academy of Social Sciences (CASS).

policies, especially through budget support.<sup>5</sup>

In fact, all attention and hopes are already focused on 2015, which will be the next major event for international climate negotiations. In Doha, France officially offered to host the Conference of the Parties in 2015 and should logically be accepted, in the absence of any other candidates.

## Vulnerability and adaptation to the impacts of climate change

A number of natural disasters marked 2012 (floods and cyclones in the Philippines, Hurricane Sandy in the United States, etc.), reminding us that no country in the world is truly safe from natural hazards. It is therefore essential to better understand the mechanisms of vulnerability and adaptation to climate change in today’s societies, in both developing and developed countries.

Supported by the Agence nationale de la recherche (ANR), the CapAdapt project uses the case of Bangladesh and Kiribati to analyse the determinants and types of societies’ capacity

5. Guérin, E. (2013). “Climate Change Development policy Operations and the Green Climate Fund”, IDDRI, *Working Papers* N°04/13.

## Avoiding maladaptation to climate change

In November 2012, IDDRI co-organised with the Stockholm Environment Institute (US Office) and the Centre for Sustainable Development (Bangladesh), and with the support of the Rockefeller Foundation, a major conference<sup>1</sup> on the topic of maladaptation to climate change. Climate change is now recognised as one of the most pressing threats to human security and well-being. It has consequently emerged as a major political issue in most countries around the world. Though the challenge of mitigating greenhouse gas emissions remains a key priority, many argue that there is also an urgent need to design and implement policies that would allow populations to adapt to the impacts of climate change.

Understandings of adaptation differ considerably across sectors and actors. Adaptation is often promoted as something tangible and measurable, which can be defined clearly and planned successfully. But the reality is that the adaptation process is only the sum of the many activities that are designed to reduce vulnerability. This confusion over the very concept of adaptation carries considerable risks. At best, a fragmented planning of adaptation will have some positive effects. At worst, it could actually undermine territories' ability to adapt successfully in the short, medium and/or long term, and therefore make them more vulnerable. This risk has been identified as maladaptation. At present, unfortunately, very few tools are available to predict which adaptation strategies are likely to turn out to be counter-productive, *i.e.* maladaptive.

1. "‘First, do no harm!’ Avoiding maladaptation to climate change", November 6-10, 2012, Bellagio (Italy).

This conference brought together 16 experts from both developed and developing countries. The group pursued two key objectives:

1. *To craft a comprehensive and innovative definition of maladaptation to climate change.* Scientists, decision-makers and practitioners currently have only a partial and over-simplified view of what constitutes maladaptation. In its Third Assessment Report, the IPCC defined maladaptation as “any changes in natural or human systems that inadvertently increase vulnerability to climatic stimuli; an adaptation that does not succeed in reducing vulnerability but increases it instead”. Yet little work has been done since then in order to further flesh out this definition. The conference was the opportunity to build a clear and operational definition of maladaptation that had already been integrated into the glossary of the Fifth IPCC Assessment Report: maladaptation is *an adaptation process that results in increased vulnerability to climate change and/or undermines capacities or opportunities for future adaptation.* The team is currently writing a scientific paper on this definition and the key related issues. Two policy briefs are also currently in the writing phase.

2. *To provide practical guidelines for avoiding maladaptation.* Based on this improved conceptual knowledge, the experts' team drafted guidelines for policy-makers and practitioners, as well as scholars. The underlying idea is to identify what should be avoided in order to actually avoid maladaptation. And what are the practical criteria and values upon which a judgment of maladaptation might be based? Work is ongoing on this issue, with fieldwork planned for 2013.

for adaptation to climate change. On the basis of empirical knowledge, the goal is to show how a better understanding of adaptive capacity can inform: (i) the implementation of adaptation policies, plans and projects; (ii) the distribution of international funding; and (iii) analysis of the determinants of climate-induced migration.

The VulneraRe project, supported by the Fondation de France, focuses on the reconstruction of “vulnerability trajectories” for coastal areas, with the goal of informing discussions on the adaptation strategies to be put in place. It involves a case study (Réunion) and a multidisciplinary team (geographers, historians, modellers, jurists and political analysts). The year 2012, the first year of the project, was aimed at establishing partnerships

(with the Réunion regional council and the Agence d’Urbanisme de la Réunion, among others) and scientific knowledge (developing a database on vulnerability and searching archives to analyse extreme events over the last 200 years as well as past resilience mechanisms).

Finally, within the framework of the DEVAST project (*see box* “Social science to analyse the consequences of Fukushima”, p. 33), supported by the ANR, IDDRI conducted an in-depth survey on the consequences of the triple disaster of 11 March 2011 in Japan. Two main issues were explored: the evacuation (approaches, problems, responsibilities) and the reconstruction of the chain of impacts of the event in order to paint a full picture of the environmental, economic, social and political ramifications. ■

# Overcoming the obstacles to sustainable urban fabric

The year 2012 enabled IDDRI's Club Ville,<sup>1</sup> which was launched in autumn 2011, to confirm its relevance. Based on a shared observation of the deadlock in finance for urban production, it set itself the task of understanding the reasons for this situation and examining potential solutions by adopting a joined-up approach. The work of the Club Ville and of the Urban Fabric programme thus focused in 2012 on future laws – and their political prospects – concerning decentralisation, housing and the energy transition, which represent an opportunity to be seized in order to launch a transition favourable to sustainable urban development.

The distribution of competences between the different levels of local authorities proves, too often to be an obstacle to sustainable urban production. This problem is particularly acute in France, where the desire for sustainable urban development reflected in the successive laws (the SRU act on solidarity and urban renewal, the Grenelle environment act, etc.) is largely dampened by the absence of any well-identified leaders for regional issues. The common will to build more sustainable cities raises some legitimate questions: who decides what today? And who is responsible for what?

The same observations and questions apply to financing sustainable cities, which is a key element of urban production. In this respect, the distribution of competences between the State and the different regional authorities in France needs rethinking. Indeed, the State retains control over local taxation, while other competences, including the implementation of planning policies (building social housing, urban renovation, etc.) have been decentralised. Municipalities, just like other local authorities, have major legal and political constraints that in reality leave them little room for manoeuvre. The State therefore still has considerable power, but it is distributed in a complex manner between six ministries: urban affairs, interior, decentralisation, housing and regional equality, ecology and finance. This results in a lack

of overall control, coherence and coordination of action taken.

The goal of a reform of competences, taxation and finance for sustainable cities should not involve simply relocating competences, but must also and above all tackle the physiology, in other words apply intelligence to the articulation between levels, which implies identifying leaders and reallocating responsibilities. If urban power is currently difficult to identify, this is mainly because the relationships between actors in the system are neither strong nor clear, and this confusion in the distribution of powers tends to increase regional inequalities.

Alongside questions of governance, it has also proved necessary to consider new economic models for sustainable cities. This in fact requires heavy

## Sustainable mobility, between energy vulnerability, taxation and ICT

Energy expenditure for local mobility is rising considerably for many households and depends for many on planning choices. This has serious implications for sustainable mobility policies, regional planning and for the question of insecurity, beyond the housing component alone<sup>1</sup>. The challenges of energy insecurity call for examining the mechanisms that currently control this vulnerability. The "allowable expenses" mechanism has been analysed, for example, with a dual focus on cities and taxation. A study<sup>2</sup> conducted by IDDRI shows that a reform of this mechanism would make it possible to reconcile the progressivity of the tax system, environmental goals and support for the poorest households. The dissemination of these ideas among parliamentary groups has led to them being taken into account in the form of an amendment adopted on the repayment scale. Finally, another study<sup>3</sup> shows that information and communication technologies (ICT) can make a considerable contribution to sustainable mobility if they are included in a process to reposition mobility actors and to redefine economic models.

1. The Club Ville is made up of representatives of local authorities, urban services and mobility companies, urban planners, developers, construction companies and financiers : ADCF, CDC, EDF, ERDF, EGIS (Villes et Paysages), EURALILLE (SPL), FNAU, GDF-Suez, Icade, Renault, Veolia, Institut Veolia Environnement, VINCI (Fabrique de la Cité, VINCI Construction).

1. Saujot, M. (2012). « La mobilité, l'autre vulnérabilité énergétique », IDDRI, *Policy Briefs* N°05/12.  
2. Chancel, L., Saujot, M. (2012). « Les "frais réels" : une niche fiscale inéquitable et anti-écologique ? », IDDRI, *Working Papers* N°19/12.  
3. Miroux, F. (2012). « Mobilité urbaine et technologies de l'information et de la communication (TIC) : enjeux et perspectives pour le climat », IDDRI, *Studies* N°05/12.

## Examining urban value creation

Research by the Club Ville has led its members to examine the issue of the value of urban projects. Public actors (the State and local authorities) no longer seem able to finance all urban requirements (for example, in France, the State launched the Grand Paris project but failed to secure financing for it), and private operators are refocusing their positioning (as contracting authorities) on the highest profit and lowest risk urban products, which calls into question methods of urban production. Thus, the traditional model, with three types of final payers (owners, taxpayers and users) is challenged. Passing on the cost of funding to final owners assumes they are in a position to bear high costs (which results in gentrification), and faces the problem of declining solvent demand. It is therefore the calculation assumptions for this economic model that must be re-examined, and this paves the way for the emergence of alternative economic models, which provide for payment for the external effects of urban production that are encouraged (biodiversity protection, the social mix, security, etc.). The study on “measuring and promoting value creation” produced by IDDRI poses the question of the profitability of urban production and is aimed first at measuring value creation and, second, at exploring the equitable distribution of the urban value created in order to ensure an equalisation between actors that takes full account of a global, long-term and sustainable perspective.

Urban value is defined as the total benefits of a project – whether socio-economic (tax revenue generation, job creation), energy-related or environmental (reduction of energy consumption, creation of green areas, etc.) –, as well as its total costs – again economic (investment in public facilities, etc.), social (gentrification) and environmental. The goal here is to identify more precisely the costs and benefits of the external effects of urban production, whether environmental (impacts on biodiversity, noise pollution, etc.), energy-related or socio-economic (security, attractiveness, better access to jobs, etc.). This research helps to avoid focusing solely on the costs, but rather on the benefit-cost ratio. It involves two stages: (i) an overview of methods for measuring the externalities for different types of externalities (including noise, biodiversity) and on different scales (building, district, urban area), and of operational methods of internalisation, as well as their legal interpretation. Special attention is given to methods for monetising environmental, energy-related and socio-economic externalities; (ii) the application of the methods identified to different types of planning operations in order to assess over time the value created in different perimeters, and to analyse the methods for distributing value by examining the power relations between actors and planning tools.

investment which, in view of the current state of national and local finances, is very difficult to find. In this context, the issue of measuring the value created by urban production and its distribution was the subject of a specific research project (*see highlight* “Examining urban value creation”, p. 28).

### Identifying obstacles to sustainable urban production

The research conducted in connection with the Club Ville helped to identify three main obstacles to sustainable urban production: 1) the current distribution of competences; 2) the organisation of urban taxation and finance; and 3) the lack of strategic planning.

#### 1. Organisation of competences

The governance levels in the French system (State, region, department, inter-municipality and municipality) have no vertical hierarchy. The structure is not organised because of the fact that no territorial unit may exercise authority over another. For urban planning issues, there are no clearly

identified leaders, and urban production appears fragmented and poorly coordinated. This French specificity, added to that of the high number of municipalities, all with basic urban planning powers (individual authorisations and local planning, exercising pre-emptive rights), makes management difficult and implies poor, unclear linkages between the different levels. Local consensus and compromise, which are the foundations of urban planning policies, do not enable the implementation of a policy that measures up to the challenges. In this context, housing and land-use planning policies (by means of ScoT plans [for regional coherence]) can only implement minor changes. The lack of leadership means that actors are not motivated to assess the costs and benefits of broad urban planning choices, and marginal calculations are used by each of the actors to the detriment of overall benefits. Likewise, the prospect of the public authority “capturing urban income” is currently largely ignored. The Malthusianism of certain councillors is combined with the “nimbysism” (“not in my back yard”) of residents,

and results in an inability to manage certain fundamental regional dynamics (social centrifugation to the suburbs). In the current institutional system, this obstacle cannot be overcome.

## 2. Taxation

This distribution of competences has implications for taxation which, along with financing mechanisms, for a given distribution of competences, impact the urban fabric. First, taxation enables the different levels to act; second, it determines local balances and negotiations, as well as development models; finally, if it is well articulated with urban policies, it can have a considerable and useful incentive effect. Regional planning documents generally ignore tax mechanisms and those to assess their effects on urban areas, which are nevertheless central to the process they must control. Land taxes are not productive, nor do they act as an incentive, and they are not based on relevant calculations; they are therefore neither fair nor effective. Moreover, the reform of the business tax has not encouraged a more regional approach to taxation, which may also sometimes be anti-environmental and socially inequitable.<sup>2</sup> The broader tax reform, which would make taxes and their use more transparent, while giving local councillors more responsibility, is still pending. The lack of leadership to guarantee regional balances, with adequate taxation, poses the question of the scale and implementation of an equalisation between sectors and between parts of the territory, enabling real planning and providing resources for urban production. This raises the dual issue of regional reform, and, concomitantly, of the reform and clarification of local finances, issues that are constantly being re-examined. Certain public policy levers are being lost, even though land policy, for example, is crucial to the control of urban income, in other words its capture and redistribution.

## 3. Actors and planning

The issue of multi-stakeholder co-production adds a final crucial stage to this assessment. The fragmentation of competences increases the financial and legal risks that accumulate and results in a preference for small projects with one public interlocutor rather than complex projects involving several actors. The majority of construction is done outside of any global finance system. But private actors are asking for strategic public planning and

a long-term vision to reduce uncertainty, in which they can participate. This strategic planning does not exist at present, in a context in which more and more urban service companies are taking an interest in cities, and creating global offers that requires responsibility and involvement by the local authorities. Guaranteeing stability, ensuring trust and allowing experimentation and increased flexibility are requirements for building sustainable cities. This balance is probably to be sought in the subsidiarity between the different public levels with, for example, one level that deals with strategy and others that experiment. The issue of assessment – especially economic – is also central, both for experimentation and for structuring local policies and, more broadly, for informing planning (*see box* “Structuring local climate policies”, p. 29). Finally, restoring confidence in public-private partnerships and promoting the legitimacy of private actors requires credible, robust public interlocutors, in whom citizens have faith. However, the high number of uncoordinated public interlocutors makes public-private collaboration more complex; consolidating the right levels must also have the objective of reducing this number of interlocutors.

## Structuring local climate policies

The AETIC project (integrated territorial economic approach for the climate), financed by the ANR as part of the “Sustainable Cities 2009” programme, has reached its conclusions. Based on the premise that the local potential for reducing greenhouse gas emissions needed to be better understood and quantified, that the concept of cost-effectiveness is essential for structuring local climate policies and that the tools needed to develop such an analysis are currently lacking, the aim of this project was to develop a suitable methodology and to apply this to the Grenoble urban region. IDDRI’s work, which is centred on the transport-urban planning dimension, helped to develop a methodology aimed at enriching the traditional analysis of options for reducing emissions in the field of transport (cost per tonne and reduction potential). The TRANUS simulation model (transport-land use) makes it possible to reintroduce the systemic components of the city, which are rarely taken into account in this type of research, and the methodology used is aimed at producing quantified results (abatement cost) as well as revealing the core assumptions and methodological choices that have a significant impact on the results. An article presenting the findings of the study will be published in spring 2013.

2. Chancel, L., Saujot, M. (2012). « Les “frais réels” : une niche fiscale inéquitable et anti-écologique ? », IDDRI, *Working Papers* N°09/12.

## Lifestyles and environmental footprint

Within the framework of the *Cahiers du CLIP* review, two projects have focused on lifestyles and their environmental footprints. These studies are the result of a multidisciplinary approach including sociologists, geographers and energy economists.

The PROMOV project (prospective analysis of lifestyles) is based on a collective exercise to develop representations of the future and of lifestyles in 2050. The authors of the resulting study<sup>1</sup> determined life stories consistent with different drivers of social change. Greenhouse gas emissions from households emblematic of the visions established for 2050 were then assessed. The originality of this research lies in its forward-looking approach. The signals indicating new behaviours (group housing, diets, new mobility practices, simple living, etc.) were first identified in order to define several trajectories for lifestyle changes in France, and their impacts on CO<sub>2</sub> emissions. The study was also based on changes in social representations and in ways of living, working and consuming, etc. that are not necessarily motivated by environmental concerns, but which may have significant effects – whether positive or negative – on energy consumption.

1 Emelianoff, C. *et al.* (2013), « Modes de vie et empreinte carbone », *Cahiers du CLIP* n°21.

The project on “new representations of energy consumption” offers a reinterpretation of household energy consumption in order to include all energy needs required to satisfy total individual consumption. Special attention was given to the energy consumption of households according to their standard of living. The study<sup>2</sup> shows that three quarters of our energy needs concern grey energy, which is not seen by consumers. Whereas direct energy consumption tends to reach a maximum irrespective of income, consumption of grey energy increases considerably with the standard of living. This kind of representation, which challenges established orders of magnitude, calls for systemic awareness of the energy issue and of the importance of consumption levels beyond the potential of energy efficiency and the efforts made in terms of the national energy mix. Grey energy consumption also calls for research on the new distribution channels for goods and services (e-commerce, community-supported agriculture, etc.), which should be assessed in terms of their integrated energy content.

2 Barbier, C. *et al.* (2013), « Nouvelles représentations des consommations d'énergie », *Cahiers du CLIP* n°22.

The context of the housing crisis, with its bleak outlook for 2013, runs through these different observations. In particular, insecurity and vulnerability linked to housing and mobility are growing, and are becoming a key political and economic issue; they also constitute the basis of discussions on the energy transition. Several studies conducted within the framework of the Urban Fabric programme have helped, first, to show that vulnerability and the possible solutions to this problem must be understood in the context of the urban fabric and questions about new technologies and taxation (*see box* “Sustainable mobility, between

energy vulnerability, taxation and ICT”, p. 27), and second, to improve our understanding of individual energy consumption practices by extending the approach in relation to classical analyses (*see highlight* “Lifestyles and environmental footprints”, p. 30).

These elements provide some valuable new avenues for the Urban Fabric programme to explore. Equalisation, both horizontal (between authorities) and vertical (from the State to the regional authorities), appears as a central issue. The question of the different methods of urban production at the European level will also be a major area of research. ■



# What development agenda for the post-2015 period?

The governance of sustainable development was supposed to reach a high point in 2012 in Rio with the 20th anniversary conference of the Earth Summit. The final text did not rise to the challenge: it is a “void agreement”, sustained by a UN process that is not so much weary as resigned. The outcome document of the Conference, *The Future We Want*, launches certain processes and fails to conclude any. The green economy, the only really new concept on the negotiating agenda, finds no practical expression in a text that pays more attention to defining what it should not be than to determining what it could be. It contains almost no effective decision and highlights, by its length and its retrospective listing of the commitments made over the last 20 years, the extent to which the political appetite for sustainable development has dwindled over the years. Rio+20 has the bitter merit of shedding a harsh light on the state of international cooperation, seen first as a cost rather than as an opportunity for greater well-being for societies. The Rio Declaration of 1992 organised a partial, negotiated surrender of sovereignty in key areas such as climate change, biodiversity loss and desertification. Contrary to this initial fervour, the 2012 text reintroduces sovereignty as a legitimate principle and presents the basic language of the negotiations in numerous areas with no hierarchy between them.

However, several innovations could transform the meagre results of Rio+20 into real leverage for change in the future. Promising experiments in direct democracy, network discussions and surveys on population preferences have been conducted. These consultations have highlighted the gaps in commitment and imagination between sustainable development diplomacy, which is cautious or even reluctant when considered collectively, and informed opinion, for which “the future we want” would have been written very differently. They suggest that there are considerable opportunities and low political risks involved in committing to a change of development model. This is a valuable achievement of Rio+20.

Another innovation, the Sustainable Development Goals (SDGs), by the very fact of being universal have little in common with their cousins, the Millennium Development Goals (MDGs) for

2015 that concern only the developing countries.

These two innovations are essential components of the development agenda known as the “post-2015 agenda”, which is one of the focal areas of the Governance programme for the next three years. It complements the work on the green economy in a context of globalisation, which has been the second area of the programme for two years now.

## Sustainable development as a conflict

Sustainable development is built by trial and error that requires cooperation on at least three levels: information and experience sharing, building and revising a common vision of possible action and, finally, preventing free-riding behaviour and non-negotiated cost transfers between countries.

As long as it was programmatic and heralded, sustainable development could appear to be the

## Removing barriers to the implementation of sustainable development

The European project on “Sustainable Development Reflexive Inputs to World Organisation” (SustainableRIO), financed by DG Research (European Commission), ended in 2012. Over the course of three years, it brought together around IDDRI (the coordinator) the London School of Economics, the Free University of Berlin and Sciences Po. Its main goal was to identify the obstacles limiting the implementation of sustainable development in public policy, through the example of climate policy and official development assistance. The project helped in particular to highlight the disconnect between the collective preferences for sustainable development expressed by experts and by public opinion, and those supported by public policies. Being politically risky, sustainable development does not attract the backing of policy makers that is called for by scientists – who assert the economic superiority of action over inaction where the climate is concerned –, experts and civil society, who are involved in numerous consultation processes. Bridging this gap in negotiations on global sustainable development goals (SDGs) is the challenge IDDRI has been given by the project for 2015.

<http://sustainablerio.eu/blog/>

## Environmental taxation at the heart of sustainable fiscal reform

Two French governments have failed in their attempts to establish a carbon tax. Since the last failure in 2010, environmental taxation has logically been withdrawn from the political agenda. But the budget crisis in Europe has brought taxation to the forefront once more.

In this context, the issue of environmental taxation has arisen again: what role could environmental taxes play within a global fiscal reform? How could this reform be part of a European process and help to stimulate activity in Europe? How can the issue of household or corporate vulnerability be addressed?<sup>1</sup>

In order to answer these questions, IDDRI and Green Budget Europe organised a two-day conference<sup>2</sup> attended by over 100 experts, government officials, NGOs and European political representatives.

The reasons for the failure of the carbon tax in France were explored, under the watchful eyes of our European neighbours. Problems of information of the public were highlighted, along with the inability of economic tools to effectively tackle the issue of winners and losers. The question of equity and compensation measures for vulnerable households was addressed by reviewing the experiences of Sweden, Ireland and Italy. It became clear that the establishment of a globally progressive fiscal reform,

making it possible to reduce the efforts of the poorest, combined with an increase in fossil fuel prices and targeted aid where necessary, is the fairest and most effective means of implementing an energy tax.

On the issue of budget consolidation in times of crisis, the elimination of harmful subsidies is an interesting option that is much discussed. Research by Vivid Economics has shown that environmental taxes are those that have the lowest recessionary impact in the short term, thanks to the energy savings they generate.

The conference also provided insights into the new tools available to the European Commission for the harmonisation of budgets. These tools provide leverage for pursuing environmental tax reform, but they also raise questions of legitimacy. Finally, the coordination of fiscal and industrial policies at European Union level is necessary and implies mutual learning, even if economic systems cannot be transposed from one country to another.

It is clear from these discussions that environmental taxation can no longer be considered in isolation. It can only be effective and fair if it is integrated into a global and European fiscal reform, and if it is part of a package of measures enabling renewed activity in the short term and ensuring the coherence of a comprehensive economic and climate policy.

1. Chancel, L., Saujot, M. (2012), « Les “frais réels” : une niche fiscale inéquitable et anti-écologique ? », IDDRI, *Policy Briefs* N°19/12.

2. “Green taxation as key for sustainable fiscal reform”, 29-30 October 2012.

result of a consensus, supported by harmonious actor preferences. In fact and in the short term, we are now discovering that it is intrinsically conflictual and that it manifests a compromise between actors with heterogeneous preferences.

Why the space for compromise is now so limited is one of the questions addressed within the framework of the European SustainableRio project, which ended in December 2012. Taking the case of the climate<sup>1</sup>, our research shows that the political preferences of the major countries in the negotiations are relatively inert over time, whereas power relations have been transformed by globalisation: the Rio compromise “for sustainable development” is no longer accessible today due to this growing gap between preferences and powers.<sup>2</sup>

1. This research was presented during several side events at the Rio+20 conference.

2. Berthaud, P., Voituriez, T. (2012). « L'effet BASIC sur la gouvernance globale du climat : le jeu des préférences et de la puissance » [The BASIC effect on climate global governance], *Économie appliquée* LXV – N°2, pp. 77-106.

There is thus an urgent need to modify preferences so that they reflect changes in power and to ensure that a new compromise for sustainable development can be reached that is not a consensus for development for some and a consensus for the environment for others. Second, taking the case study of the attempt to establish a carbon tax in France, our research has highlighted the role that could be played by the identification of winners and losers in the negotiation of a compromise.<sup>3</sup> Paradoxically, while it facilitates the establishment of compensation or the enlargement of the negotiating arena with a view to increasing potential gains for all actors, the identification of winners and losers also feeds political inertia and risk aversion among decision makers by highlighting the adverse effects of distribution. This research was co-financed by ADEME and has given rise to presentations

3. Sénit, C.-A. (2012). “The Politics of Carbon Taxation in France: Preferences, Institutions and Ideologies”, IDDRI *Working Papers* N°20/12.

and workshop debates bringing together French members of parliament, NGOs, researchers, union members and senior French civil servants.

### Building the post-2015 development agenda

Included in the post-2015 development agenda, the SDGs are developed and discussed within two official processes that are informed by consultations conducted by international organisations and research by NGOs and think tanks. First, the United Nations General Assembly created a working group whose mandate is to define the goals of sustainable development for the post-2015 period. Second, the United Nations Secretary-General mandated a High-Level Working Group to produce a report in spring 2013 on the post-2015 development agenda. He also tasked Jeffrey Sachs with creating a Sustainable Development Solutions Network, whose scientific council is co-chaired by Laurence Tubiana, and whose mission is primarily to mobilise the scientific and technical expertise available in order to test solutions to the problems of sustainability facing the planet.

What path should such an agenda take, between the ambition imposed by the serious issues at stake and the realism recalled by the meagre results of Rio+20? To outline some practical responses to this question, IDDRI and FERDI, in collaboration with the French Ministry of Foreign Affairs, launched a series of workshops on 9 October 2012 concerning the post-2015 development agenda. Bringing together think tanks, researchers, associations, senior civil servants and companies, these workshops are aimed at building bridges between the research communities and networks concerned by the integration of the MDGs and SDGs into a common post-2015 agenda that is both realistic and ambitious.

The organisation of this series of workshops is accompanied by a mapping exercise of appetites and ambitions outside Europe, an inventory of the minimum commitments that States should make in view of their past international commitments, and a critical reading of the contributions of the major public consultations to the negotiation process itself and to its potential achievements.

### Green economy and globalisation

In 2011, IDDRI launched a study on the economic foundations of the green race, its content, its expectations in terms of growth and employment, and its implications for the distribution of value added within two sectors taken as the primary field of application—photovoltaics and wind power.

## Social science to analyse the consequences of Fukushima

IDDRI is coordinating the DEVAST project<sup>1</sup> (Disaster Evacuation and Risk Perception in Democracies), one of the very first international projects to study the political and social consequences of the Fukushima disaster of March 2011.

As part of this project, conducted in partnership with teams from the Tokyo Institute of Technology and Waseda University (Tokyo), IDDRI has particularly focused on the population displacements caused both by the tsunami and by the nuclear accident, from a comparative perspective. More than 350 000 people have been displaced by the two combined events. After an in-depth ethnographic study among the victims of the disaster, the project has revealed serious inequalities of treatment between the different categories displaced, and the inadequacy of the government response to the nuclear accident.<sup>2</sup> The initial findings of the project were presented in Paris during the Sustainable Development and Environmental Economics Seminar (November 2012) and in Tokyo as part of the Earth System Governance Project (January 2013).

1. [www.devast-project.org](http://www.devast-project.org)
2. IDDRI paper, forthcoming.

Conducted from a European perspective, initial research<sup>4</sup> has helped to better identify the conditions for the emergence and deployment of innovative technologies and refuted the idea that disruptive innovation is the key to trade leadership and growth.<sup>5</sup> This research has been pursued and developed in Europe's trade partner countries where other production and innovation deployment processes are underway, such as the BASIC countries (Brazil, South Africa, India and China), where the investment volumes and increasing export market shares in specific parts of renewables sectors seem to justify with hindsight the publicity given to the concept of the green race in the American and European discourse.

Our first findings show that the green economy, as it is taking shape in the emerging countries, is based on the planned exploitation of a specific factor of production that is abundant in comparison with the others, in other words natural capital (biomass) in the case of Brazil, financial capital

4. Voituriez, T., Balmer, B. (2012). "The Muddle over the Green Race", IDDRI, *Studies* N°02/12.

5. Voituriez, T. (2012). "Clarifying the Muddle Over the Green Race", IDDRI, *Policy Brief* N°09/12.

## China-Europe, ending the conflict

China has set up an “industrial ecosystem” capable of producing and designing anything. In the context of a new industrial revolution, which is beginning to emerge but is slow to materialise, the issue of financing an innovative industrial ecosystem is approached differently, especially in terms of the articulations between private and public finance, and the linkages between Europe and China. IDDRI has explored the challenges of trade and of business partnerships between China and Europe for two key sectors, green technologies<sup>1</sup> and the automotive industry,<sup>2</sup> highlighting the considerable weight of the Chinese State and the need for European industrial vigilance in order to prevent the establishment of “absolute advantages”, now an officially debated policy in China.<sup>3</sup> But these changes are inadequately monitored, for example by the G20 and Think 20, whose first meetings have been analysed.<sup>4</sup>

Positive solutions can still be found, however, and IDDRI’s research has focused on analysing and promoting these, especially among the French and Chinese public authorities. Opportunities for co-investment by China and Europe in the field of the energy transition are put forward, for example by mobilising Chinese reserves in private European investment funds (private equity) backed by sovereign wealth funds,<sup>5</sup> and this issue is also analysed for Africa.<sup>6</sup> An article on the political and social terms and impacts of Chinese and Indian investment in Europe was also widely debated following its publication in China.<sup>7</sup>

Finally, a proposal was made to recycle Chinese reserves by securing them with global monetary creation, through special IMF drawing rights that are restructured and targeted at global public good projects.<sup>8</sup>

1. Voituriez, T., Ruet, J. (2012). « Les pays émergents dans la course aux technologies vertes : l’Europe peut-elle se satisfaire d’importations bons marché ? », in *Regards sur la Terre 2013 - Réduire les inégalités : un enjeu de développement durable*, Armand Colin-AFD-IDDRI-TERI.

2. Balcet, G., Ruet, J. (2012). « From Joint Ventures to National Champions or Global Players? Alliances and Technological Catching-up in Chinese and Indian Automotive Industries », *European Review of Industrial Economics and Policy*, n°3.

3. Ruet, J. (2012). « La Chine, “siphon” de l’économie mondiale », *Le Monde*, 3 December 2012, and Ruet, J. (2012). « Avec Pékin, l’heure est venue de parler franchement », *Le Monde*, 8 October 2012.

4. Ruet, J., Chancel, L. (2013), « Le T20, réservoir à idées du G20 », *Le Monde*, 21 January 2013.

5. Bellevrat, E., Ruet, J. (2013). « Quels financements pour la «ChineEurope» ? », *Confrontations Europe* N°101 (April-June 2013).

6. Chancel, L., Ruet, J. (2013, forthcoming), *Liaison Énergie Francophonie*.

7. Eymond-Laritz, T., Ruet, J. (2012). “Selling Europe”, CaixinOnline, 21 May 2012: <http://english.caixin.com/2012-05-21/100392171.html>.

8. Ruet, J. (2012), “Dealing with Financial Crisis: A New Fund for Global Stability and Investment”, Center for China in the World Economy, Tsinghua University: [http://www.ccwe.org.cn/ccwenew/cnnews/\\_1111.html](http://www.ccwe.org.cn/ccwenew/cnnews/_1111.html), and talks during conferences organised by 4D, Fondation Nicolas Hulot and La Fabrique de l’Industrie.

in China (trade surpluses and bank liquidity) and social capital (the “industrial ecosystem”) in the case of both China and Brazil, and to a lesser extent that of India. The political creation of an industrial ecosystem, with the considerable involvement of the private sector in China in particular, has played a leading role in the appropriation and the exchange of best available technologies and, ultimately, in the economic catch-up we have observed over the last 10 years.

However, we are witnessing the end of an industrial cycle in the BASIC countries, as is the case in Europe at present. Innovation and risk taking are now needed to develop second generation fuels (Brazil), high-efficiency thin film photovoltaics (China and to a lesser extent India), grid connection and maintenance (China and India) and the deployment of offshore wind power (China). The experiences of India and especially China have involved catching up with mature technologies by

virtue of a cost advantage that has led to leadership in terms of market share for commercially available technologies. The green race therefore continues. And its challenges are changing, since in certain countries such as France, the need for profit or growth is now joined by the political ambition to make the green economy an “industrial” economy. With its ever increasing, potentially contradictory political objectives, the green economy is at risk of resembling multifunctionality in agriculture (the production of food products, but also ecosystem services), which was in “diplomatic” vogue in Europe at the turn of the 20th century: a means of satisfying everybody and ultimately producing nothing whatsoever.

The perspective remains the same as that of the other focal areas of the programme: 2015 and the definition of a sustainable development agenda that leads individuals and economies onto largely unexplored sustainability pathways. ■

# Institutional framework

**F**ounded in 2001, IDDRI is a Foundation of public interest. The new statutes of the “Research Foundation Institute for Sustainable Development and International Relations”, known as IDDRI (Institute for Sustainable Development and International Relations) were approved by the French Council of State on 4 November 2009.

Since 2007, two strategic partnerships structure IDDRI’s activities: one with Sciences Po in Paris (complemented with a partnership with Columbia University under the Alliance Programme) and another one with the Foundation for international development studies and research (FERDI) in the framework of the Development and Global Governance Initiative (IDGM), launched in 2009 and supported by the French Development Agency. This initiative has been reinforced in 2011 by the IDGM+ project “Conception of new international development policies based on research results. Reinforcement of the Development and Global Governance Initiative”. The project was selected by the Ministry for Higher Education and Research to be part of the Laboratoires d’excellence (excellency labs) projects (LABEX), financed through the government’s Investissements d’avenir (Invest in the future) programme. Put forward by FERDI, in partnership with IDDRI and CERDI (Centre for studies and research on international development), this project, which IDDRI launched in 2012, aims at developing a European interface of international scope, between research and policy recommendation concerning key themes regarding sustainable development and international development.

The questions under study concern on the one hand the evaluation of development policies and their reconfiguration in order to integrate sustainable development issues (climate change, biodiversity, trade and the environment) and on the other hand issues of international coordination and organisation of global governance. ■

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## IDDRI’s board is made up of 3 constituencies:

### *Founding members:*

- EDF, represented by Claude Nahon
- EpE, represented by Claire Tutenuit
- GDF-Suez, represented by Françoise Guichard
- Institut Veolia Environnement, represented by Pierre Victoria

### *Ex officio members:*

- Ademe, represented by François Moisan
- AFD, represented by Rémi Genevey
- Cirad, represented by Pierre Fabre
- CNRS, represented by Stéphanie Thiebault
- INRA, represented by Michel Eddi

### *Qualified persons:*

- Jean-Michel Charpin
- Michel Griffon
- Jean Jouzel
- Jean-François Soussana

### *Executive board:*

- Jean Jouzel, President
- Françoise Guichard, Vice-Chair
- Claude Nahon, Treasurer
- Michel Eddi, Secretary

**A government’s commissioner**, designated by the Ministry of Interior, attends the board’s working sessions with an advisory status. He sees that the foundation’s statutes and the public interest dimension of its activity are guaranteed.

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## IDDRI’s scientific council is made up of 13 members:

- Philippe Aghion (Harvard University, Sciences Po)
- Scott Barrett (Columbia University)
- Ian Goldin (Oxford University)
- Pierre-Henri Gouyon (Muséum National d’Histoire Naturelle, AgroParisTech, Sciences Po, CNRS)
- François Guinot (CNRS, Académie des technologies)
- Alain Grandjean (climate-energy expert at the Grenelle de l’environnement)
- Claude Henry (Sciences Po, Columbia University)
- Sylvie Joussaume (CNRS)
- Georgina Mace (Grantham Research Institute on Climate Change)
- Laurent Mermet (ENGREF-AgroParisTech)
- Shyama Ramani (Brunel University)
- Lord Nicholas Stern (Grantham Research Institute on Climate Change and the Environment et I.G. Patel Professor of Economics & Government, LSE)
- Michel Vivant (Sciences Po)

## Advisory council

**I**DDRI's advisory council, chaired by Daniel Lebègue, was held on 12 December 2012.

Laurence Tubiana took stock of the Rio+20 conference, noting on the one hand the paralysis of the international cooperation system, and on the other, the hopes generated by the process to develop the sustainable development goals for 2015 for restarting talks on development models that the concept of the green economy had instead brought into conflict. In this context, IDDRI's priorities for action are especially embodied in its active participation in the Sustainable Development Solutions Network, set up by the United Nations, and in the launch of a research project on participatory processes in international negotiations; the oceans agenda (especially the regulation of offshore drilling and the protection of high seas biodiversity), which was also addressed at Rio+20, is one of IDDRI's priorities. Finally, IDDRI will be involved this year in preparations for the 21st Conference of the Parties to the Climate Convention, which will be held in Paris in 2015.

The advisory council stressed the need: to plan France's action in preparation for this conference within the European framework, taking care to integrate Eastern Europe, especially around a long-term vision of the green economy; to go beyond the concept of historic responsibility for greenhouse gas emissions in order to move away from the sterile North/South divide; and to improve the dialogue between different sustainable development actors, especially by striving to develop new ways of involving private actors, civil society and authorities in intergovernmental negotiation processes. Moreover, issues of funding for sustainable development must be tackled by dedicated international teams, and France can put forward its expertise in this field.

The cross-cutting work programme on "New prosperity" (*see* "What future for growth?", p.11) was presented. Its aim of which is to examine the dynamics of growth and its interactions with the environment, and to analyse the linkages between growth and a new prosperity based in particular on the ecological transition. The advisory council underlined its relevance and ambition, and proposed several additional avenues for research, focusing first on the value of integrating this project into a global perspective, exploring not only the context of mature economies with stagnant growth, but also the reformulation of growth in emerging countries. The demographic dimension will also need to be analysed in this research on the evolution of growth. The historic perspective on industrial revolutions is considered relevant, and even more so if it takes into consideration different national political and economic contexts. The council believes it is important to study incentives and constraints (taxation, etc.) for the creation of an innovative society. Likewise, it is necessary to examine political and economic interests as obstacles to and/or leverage for the ecological transition. Finally, it is crucial that the programme compares several approaches (the different "stories" of the crisis and of growth) and facilitates consensus building. ■

### IDDRI's advisory council is made up of 23 members:

#### *Administrations*

- Michel Badré (CGEDD)
- Pierre-Franck Chevet (Ministry of Ecology)
- Philippe Lacoste (Ministry of Foreign Affairs)
- Claude Nahon (EDF)
- Kareen Rispal (Lafarge)
- Jean-Pierre Tillon (InVivo)
- Claire Tutenuit (EpE)
- Gilles Vermot-Desroches (Schneider Electric)

#### *Research institutes and universities*

- Patrick Duncan (CNRS)
- Michel Eddi (INRA)
- Sylviane Guillaumont (Auvergne University)
- Jean-Charles Hourcade (CIRED)
- Christian Lequesne (CERI)
- Marc Pallemarts (IEEP)

#### *Private sector*

- Matt Christensen (Axa-Investment Managers)
- Pierre Ducret (Caisse des dépôts Climat)
- Françoise Guichard (GDF-Suez)

#### *Non-governmental organisations and trade unions*

- Pierre-Yves Chanu (CGT)
- John Evans (TUAC)
- Timothy Geer (WWF International)
- Daniel Lebègue (IFA)
- Camilla Toulmin (IIED)

#### *Local authorities*

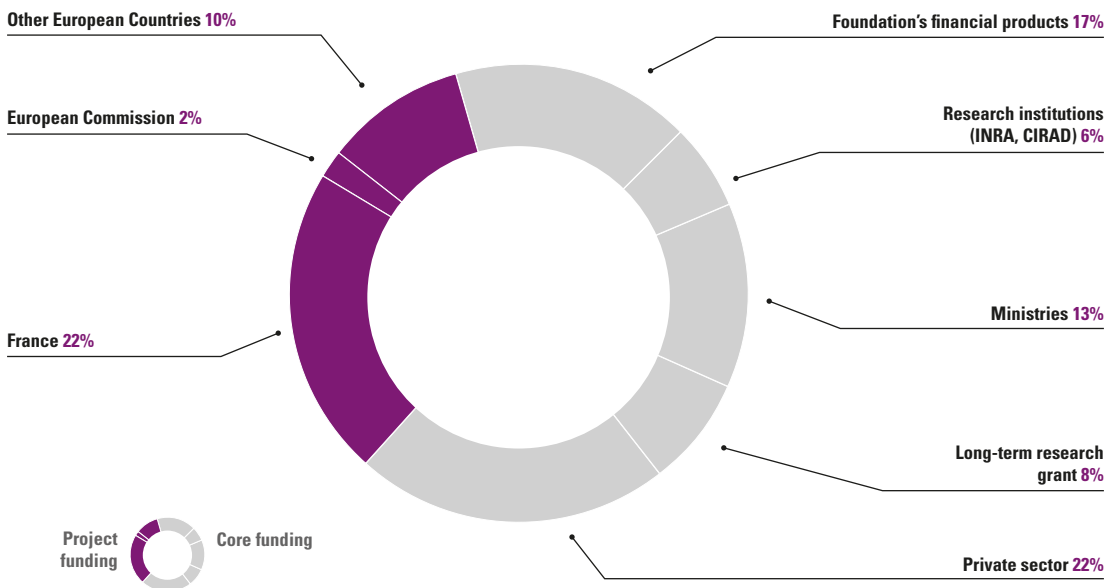
- Denis Baupin (Deputy to the Mayor of Paris)

# Budget

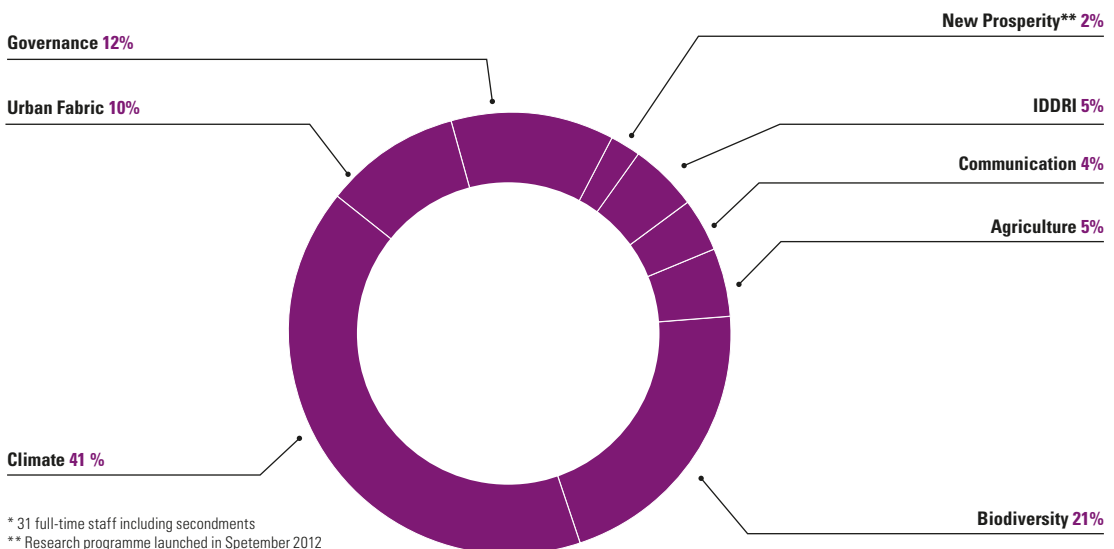
In 2012, the Foundation's budget was set at 3.5 million Euros, including secondments' costs. Resources are provided by the founding members, research centres (in the form of staff secondments), ministries (Foreign Affairs, Ecology, and Research), various national

and international partners as well as European projects. In 2011, IDDRI was awarded a long-term research grant within the framework of a special ten-year government investment (LABEX) (*see* "Institutional framework", p. 35).

## FUNDING SOURCES



## DISTRIBUTION PER PROGRAMMES \*



\* 31 full-time staff including secondments  
 \*\* Research programme launched in September 2012

# Team



**Noura Bakkour**  
Special Assistant to the Director



**Pierre Barthélemy**  
Publication and Web Content Manager



**Raphaël Billé**  
Programme Director Biodiversity and Adaptation



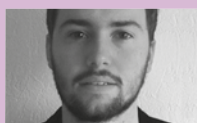
**Pauline Brücker**  
Research Fellow Migrations



**Matthieu Brun**  
Research Fellow Food and Agriculture Policies



**Lucien Chabason**  
Senior Advisor



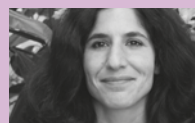
**Lucas Chancel**  
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**Tiffany Chevreuil**  
Administrative Assistant and Financial Assistant



**Claudio Chiarolla**  
Research Fellow International Governance of Biodiversity



**Julie Cohen**  
Outreach Assistant



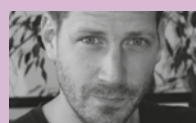
**Michel Colombier**  
Scientific Director



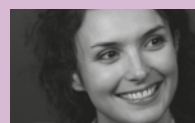
**Elise Coudane**  
Events & Outreach Manager



**Lisa Dacosta**  
Secretary-General



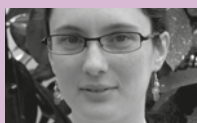
**Damien Demailly**  
Coordinator New Prosperity Programme



**Delphine Donger**  
Communications and Media Officer



**Elisabeth Druel**  
Research Fellow Governance of High Seas Biodiversity



**Laetitia Dupraz**  
Assistant



**François Gemenne**  
Research Fellow Climate and Migrations



**Emmanuel Guérin**  
Programme Director Climate & Energy



**Joanne Jordan**  
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**Benoît Martimort-Asso**  
Development & Communications Director



**Océane Peiffer-Smadja**  
Research Fellow Urban Fabric



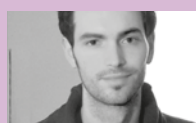
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**Vincent Renard**  
Senior advisor. Urban Fabric



**Julien Rochette**  
Research Fellow Oceans and Coastal Zones



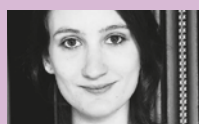
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Research Fellow Urban Fabric



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**Carole-Anne Sénit**  
PhD student Governance



**Thomas Spencer**  
Research Fellow Climate and Energy Economics



**Lucilia Tanchereau**  
Administrative and Financial Manager



**Sébastien Treyer**  
Director of Programmes



**Laurence Tubiana**  
Director



**Tancrède Voituriez**  
Programme Director Governance



**Xin Wang**  
Research Fellow Climate and Energy Policies - China



**Raphaële Yon-Araud**  
Club Ville Manager



**Yann Laurans**  
Associate Researcher



**Joël Ruet**  
Associate Researcher



# Interns

Every year, IDDRI welcomes several student interns working on its research topics.

## Sarah Callet

1 October – 31 December 2012

*Université Paris Descartes*

Research on the international regulation of offshore oil exploration and production

## Frédéric Cauvin

5 March – 29 June 2012

*École des Ponts ParisTech*

Climate services: what definition and organisation of the energy and water sectors for the industrial world?

## Charles Deffresnes

1 October 2012 – 31 May 2013

*Sciences Po*

New-institutional sociological and economic research on emerging behaviours and lifestyles in eco-districts

## Daria Mokhnacheva

23 July – 24 September 2012

*Sciences Po*

Assistant to the research fellow for the DEVAST and CADHOM projects

## Béatrice Paviot

2 May – 22 June 2012

2 July – 9 November 2012

*AgroParisTech*

Agriculture and forest sectors: from a sectoral approach to intersectoral dialogue, opportunities for addressing environmental challenges for donors

## Océane Peiffer-Smadja

2 April – 30 September 2012

*AgroParisTech*

Analysis of methods for internalising the externalities associated with urban production

## Maud Poissonnier-Lescuras

9 October 2012 – 8 April 2013

*Université Paris Sorbonne*

Assistant to the research fellow for the RAMSES project

## Jean Roisse

10 July – 10 September 2012

*Sciences Po*

Research on climate and energy policy in Brazil within the framework of the Learning Platform

## Amélie Rudloff

3 September – 31 December 2012

*Sciences Po*

Research on environmental information

## Ozlem Taskin

1 January – 30 June 2012

*Université Goethe, Francfort*

Research on the contribution of impact assessments to development assistance reforms

## The team of the Sciences Po Chair of Sustainable Development

- Laurence Tubiana, Director
- Claude Henry, Scientific Advisor
- Anne-Laure Faure, Partnerships Officer
- Julie Cohen, Assistant
- Elise Vecchione, Research Assistant (until December 2012)

## Programmes taught by IDDRI and the Chair

- Master in Environmental Policy
- Master in International Affairs, specialisation in Environment, Sustainable Development and Risks
- Master in Public Affairs
- Master in International Development
- Undergraduate Economics

## Staff

Raphaël Billé, Lucas Chancel, Michel Colombier, François Gemenne, Emmanuel Guérin, Renaud Lapeyre, Benoit Lefèvre, Romain Pirard, Vincent Renard, Mathieu Saujot, Marie-Hélène Schwoob, Sébastien Treyer, Laurence Tubiana, Tancrede Voituriez.

# Key figures

## Website

- New website launched in September 2012 (new navigation by research area, multimedia page, research filters, etc.)
- 40% of visitors from outside France
- Considerable increase in visitors from the following countries and regions: Brazil, Bulgaria, China, Ecuador, Ghana, Greece, Iceland, Italy, Martinique, Mauritius, Mayotte, New Zealand, Philippines, Poland, Qatar, Romania, Slovakia, Slovenia, South Korea, Spain, Thailand, Togo
- 13 videos online (sessions of the Seminar on Sustainable Development and Environmental Economics, and the IDDRI/ Fondation d'Entreprise Hermès annual conference)
- Videos available on IDDRI's site, TerreTV, but also on YouTube, Dailymotion and Vimeo

## Publications

- 47 IDDRI publications (+40% in relation to 2011)
  - ▶ 23 Working Papers
  - ▶ 17 Policy Briefs
  - ▶ 8 Studies
- 1 book in partnership
  - ▶ *A Planet for Life 2012 – Development, the environment and food: towards agricultural change?*, Armand Colin-AFD-TERI-IDDRI
- 27 external contributions
  - ▶ 18 contributions to scientific reviews (more than two thirds in foreign reviews)
  - ▶ 9 contributions to books
- 2 reports and briefing papers (in English), on the ICZM protocol (integrated coastal zone management)
- 805 quotations, interviews, articles and columns in printed and online media
- 8 columns in national and international newspapers
- 11 radio interviews

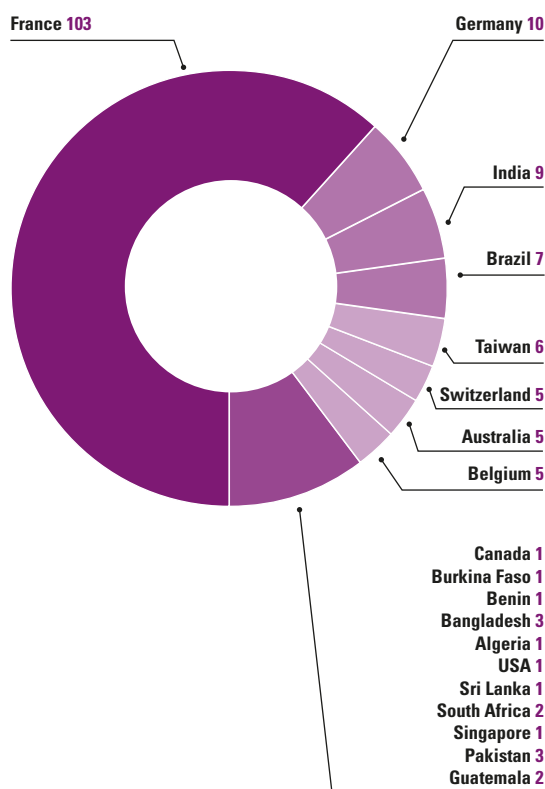
## Activities

- 9 international conferences + 2 side events during international events
- 14 conference-debates
- 14 workshops
- 10 sessions of the SSDEE
- 104 speeches by the IDDRI team in France and abroad
- 1 Summer School
- Screening of the film *La Négociation : qui veut sauver le climat ?*

## IDDRI at Rio+20

- ▶ 12 interventions
- ▶ 2 side events

## Global media coverage by country during the Rio+20 conference



# *A Planet for Life,* an annual publication on sustainable development

*A Planet for Life* unravels the complexity of the processes underpinning sustainable development. It presents the many potentialities of this multifaceted concept through a study of the growing issues, mutations and highlights within the field of sustainable development.

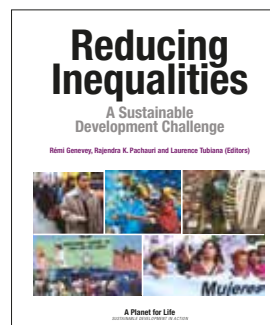
Prepared under the scientific leadership of the French Development Agency (AFD, France), The Energy and Resources Institute (TERI, India), and the Institute for Sustainable Development and International Relations (IDDRI, France), the book is published by TERI Press.

Each year, *A Planet for Life* addresses a key, transversal issue, of sustainable development, bringing together a great variety of expertise: academics from a variety of fields (economists, jurists, geographers, biologists, physicists etc.), practitioners, NGOs, from all around the world, under the scientific leadership of leading figures in this field. Previous topics have included energy policies, sustainable cities and governance. In its French edition (*Regards sur la Terre*), the book also comes back each year on the major events that have shaped the international agenda in issues of climate change, biodiversity, natural resources, governance, energy and development.



*A Planet for Life 2012*  
– *Towards Agricultural Change?* focuses on agriculture and its relation to development,

food and the environment. At the end of the 2000s, a consensus has emerged and points to the urgent need for massive investment in the agricultural sector, which is (once again) viewed as one of the prime engines for development and food security, as well as for poverty reduction. But what exactly does this consensus cover?



The 2013 edition of *A Planet for Life* highlights the relationships between growing inequality and the unsustainable nature of our development paths. Inequalities between and within countries mobilise actors more today than 20 years ago. But can they now make it to the top of the development agenda? Reducing these inequalities requires a better redistribution of income from growth, but also social and political innovation, which is examined at the national and international levels in this book.

# IDDRI



SciencesPo.

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التقريب، الذي نصيبو  
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