

Analysis, anticipation, dialogue

VEOLIA INSTITUTE

ACTIVITY REPORT 2014/2015

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Editorials



**JEAN PIERRE
TARDIEU**
President

Over the past year, the Veolia Institute has had to contend with two major challenges: the first, performing its missions effectively and achieving its self-imposed performance level within the confines of the very strict budget constraints imposed by the current economic climate; the second, replacing two of the five leading members of its management team.

This twofold success, which has ultimately left the Institute stronger than ever before, is attributable first and foremost to all that the Institute has built up over its fourteen years in existence: a highly motivated and responsive team, supreme professionalism in the organisation of its output (conferences, studies, publications), acknowledged credibility in scientific circles, and a powerful capacity to attract and draw together (a capacity described by Pierre Marc Johnson, Chair of the Institute's central governing body, the Foresight Committee, as "convening power"). This success was marked particularly in 2014 by the exceptional impact of our Washington Conference on Ecosystems, and by the level of

quality and the reach of our two publications, S.A.P.I.EN.S and FACTS Reports. It has not come about by chance, but as the result of hard work on the part of all of the team, to whom I would like to pay tribute. And I would also like to extend special thanks to two managers who left us at the end of the year: Georges Valentis, Managing Director of the Institute since its founding in 2001, a patient, determined and effective builder of the edifice, and Gaëll Mainguy, who from 2006 brought fresh vision and impetus to our scientific publications and studies.

“The Institute's success was marked particularly in 2014 by the exceptional impact of its Washington Conference.”

I am pleased and proud that at the end of the year the Institute was able to attract two people who have lost no time in bringing their intellectual qualities and motivation to bear in taking over the baton from their predecessors and keeping the Institute on its trajectory of excellence, a guarantee of continued success: Dinah Louda as Executive Director of the Institute, and Nicolas Renard as Director of Foresight. I would like to thank them for having so swiftly assimilated the values and advantages of the Institute, whilst at the same time bringing in new ideas and exciting visions for the future.

Finally, I would like to thank the Veolia Group and its senior management for their continued confidence. The new Veolia is built on an ambitious and creative vision of the future. The Veolia Institute is primed and ready to continue offering the Group and its stakeholders the benefits of its original foresight and scientific thinking, in accordance with its requirements for rigour, objectivity and attentiveness to its environment.

It is a source of great pride to take over the reins, alongside Jean Pierre Tardieu, of the finely honed instrument of foresight thinking that is the Veolia Institute, hitherto managed with such dedication by Georges Valentis and the small, talented and close-knit team around him, now reinforced by Director of Foresight Nicolas Renard. It is also a very great responsibility, so wide-ranging are the Institute's missions, so testing its demands and so illustrious its partners. After fourteen years in existence, the Institute can be justly proud of its renowned Foresight Committee, its very high-level conferences, its quality publications and its diversified network of experts. Confirmation of the Institute's value to Veolia, even during a period of severe budget constraints, is the best possible testimony to the pertinence of its positioning and actions.

The Institute's mission, to be an instigator of new ideas and a platform for dialogue on subjects at the interface between environment and society, meshes with the present needs of both the Veolia Group and its stakeholders at a time when the challenges to be met, whether global or local, call for innovative approaches, decisions and alliances.

“Be an instigator of new ideas and a platform for dialogue on subjects at the interface between environment and society meshes with the present needs.”

From this standpoint, the Group's support for the Institute is a huge advantage, which must be assumed fully and transparently. It calls for a subtle balance between proximity and distance: between economic, academic and NGO actors that, while their interests may diverge, find common ground on essential issues, and between making a valuable contribution to the Group on the one hand and, on the other, preserving



**DINAH
LOUDA**
Executive Director

the independence and scientific rigour that have always formed, and will continue to form, the sole basis for the Institute's legitimacy.

This role as “homing head” synchronised with the global intellectual ecosystem is particularly important in today's world, as the pace of history accelerates and Veolia completes its strategic repositioning. In order to address subjects such as the future of cities, scarcity of resources, management of the commons, or social acceptability, potential future solutions will patently require new interconnections between the authorities, businesses, the scientific world, NGOs and citizens. The Institute must be in a position to use its networks and tools to feed into the vision of all, to identify new and sometimes disruptive ideas, and to participate in their dissemination once they are validated and show promise for the future.

You can count on my enthusiastic commitment to pursuing and renewing this fertile, high-level conversation between Veolia and its intellectual and economic ecosystem, between present and future, between man and nature.

About the Veolia Institute

Founded by Veolia in 2001, the Veolia Institute has made its mark as a unique platform for promoting foresight analysis of issues at the interface between society and the environment. Its particular strength lies in its unrivalled combination of scientific method and analysis of field practices.

Founded ● 2001	Located ● Paris	Scope ● International	Funding ● Veolia	Team ● 5 people
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The idea behind the founding of the Veolia Institute in 2001 was that an independent think-tank dedicated to analysing future trends could provide Veolia with valuable insights, feeding into its vision for the long term and beyond and contributing, through its unique operating method, to public debate.

The Institute's status: a non-profit organisation, under French law.

The Institute's mission: to explore the future at the point where the environment meets society.

The Institute's aim: to descry the earliest signs of change on the horizon, identify the leading experts in fields of intellectual exploration and promote understanding of complex issues through dialogue between all those involved in sustainable development.

A unique platform

Through constant dialogue with the foremost intellectual, scientific and NGO communities working in its areas of interest, the Veolia Institute invents new ways for Veolia to interact with civil society, by being attentive to the slightest signals and maintaining constant exchanges with its partners. The Institute creates links and makes it possible to test ideas against field practices, which is what makes its contribution so original.

From this unique standpoint, the Institute seeks to shed light on how best to understand the world of the future and identify the levers that can bring about the changes that are needed.

Working in partnership is part of the Institute's genetic make-up. In its early days, the Institute created a network of experts in France, joining forces with centres of excellence such as the CNRS, CIRED, IDEI, IDDRI, Polytechnique and Sciences-Po, then extended its international reach to the United States, with MIT, Wharton School, the University of Columbia and the National Academy of Sciences, and to India, China and beyond, working with international organisations such as the United Nations Environment Programme, the World Bank and the International Union for Conservation of Nature.

Themes at the intersection of the environment and society

Designed as a tool for shared reflection, the Institute sets out to detect emerging themes and identify ways forward for the future. Of the many subjects to be found at the interface between society and the environment, the priority themes are those that will shape society and determine the future of the city, of the economy in general and of essential services: the question of the planet's resources and limits, for example, climate and energy, environment-driven changes and their impacts on society (inequalities, migrations, etc.), the social acceptability of major infrastructure projects, the future of cities (resilient, smart, inclusive). This vast scope allows the Institute to analyse environmental issues in all their many aspects. It is this unfettered range that enables the Institute to identify new and sometimes even disruptive ideas and, in so doing, to extend its influence to a wide variety of targets and partners.

Powerful tools for identifying and sharing knowledge

In pursuit of its objectives, the Veolia Institute deploys three instruments to help capture the information needed to analyse and understand emerging issues and to fuel public debate:

- **A programme of international conferences on emerging and future trends**, in the form of multidisciplinary forums highlighting the main environmental issues. In 2014: focus on the theme of Ecosystems Restoration at the U.S. National Academy of Sciences in Washington DC.
- **Two scientific journals to meet an ever more pressing need**: easy access to peer-reviewed, integrated and decompartmentalised knowledge. S.A.P.I.EN.S reports on the most striking thinking on sustainable development, while FACTS Reports is dedicated to capitalising on experiments in the field conducted by actors of all kinds (NGOs, social entrepreneurs, etc.). Once again in 2014, the journals featured themed editorial partnerships.

► **Ad hoc foresight studies**: an opportunity to carry out in-depth foresight analyses of a complex and significant topic. 2014 was a year of capitalising on analyses of the environmental performance of cities and reinforcing networks on the subject of urban resilience.

Year after year, the Veolia Institute has pursued its programme of work whilst at the same time strengthening the interconnections between the tools it offers. This process of consistent consolidation adds not only to the Institute's effectiveness but also to its international credibility.

The progress thus made has earned the Institute growing recognition from European and UN institutions (see box) as a legitimate platform for knowledge sharing and networking.

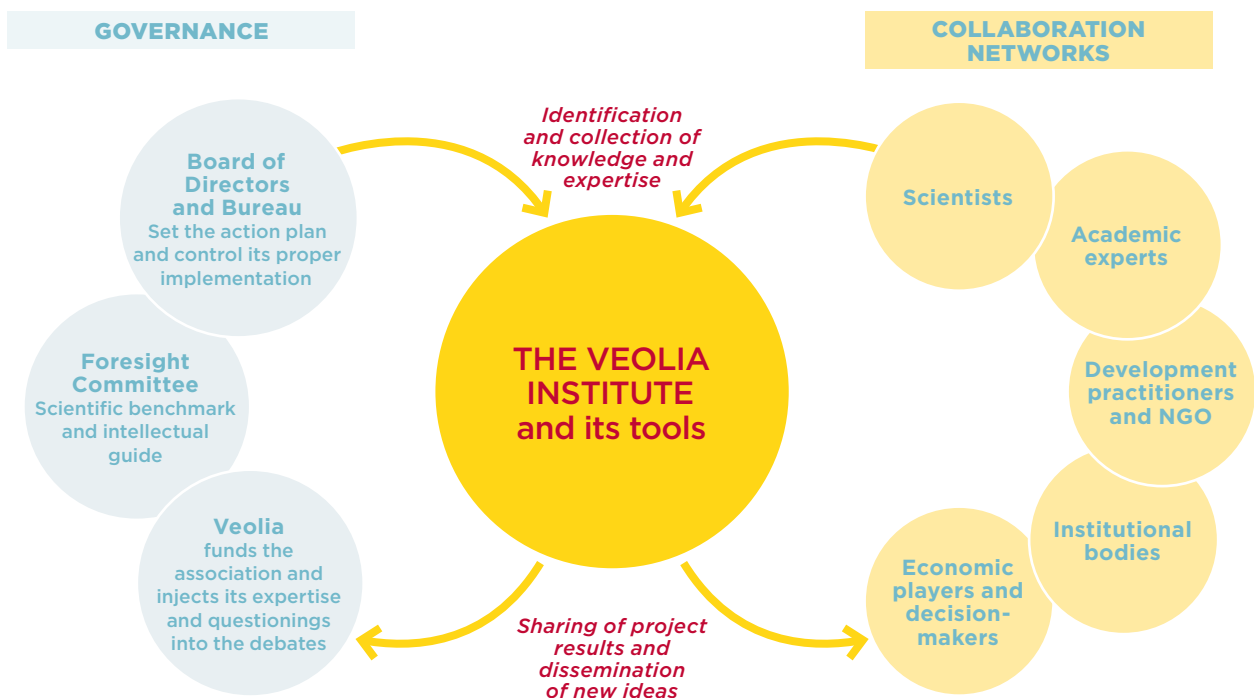
Official accreditations

2012

- Member of the Civil Society network of the United Nations Department of Economic and Social Affairs
- Accredited by the European Commission as a research organisation under the 7th Framework Programme for Research (FP7)

2014

- Application to the UNFCCC for accreditation as an NGO with observer status



Balanced governance

The Veolia Institute is governed by two bodies, which together provide a qualified external view guiding its work whilst at the same time anchoring the Institute firmly in the everyday realities faced by an economic player of the stature of Veolia.

► **The Board of Directors**, with its diversified membership – representatives of Veolia, members of the Foresight Committee, acknowledged external experts – embodies the original positioning of the Veolia Institute and the bridges it has built between private sector players, representatives of civil society and scientific circles.

► **The Foresight Committee** has supported the Institute and guided its development unfailingly since 2001, establishing its scientific credentials by virtue of the international standing of its members and the specialist knowledge each of them brings from their particular field of expertise: human sciences, economics, public health, climate science.

In autumn 2014, the Veolia Institute invited Mrs. Yuriko Koike to join the Committee. Mrs. Koike is a member of Japan's House of Representatives and a former Minister of the Environment and Minister of Defence. An acknowledged expert in international and environmental politics in Japan and across Asia, she brings her own valuable contribution to the range of expertise represented on the Committee and opens the way for the Institute to expand its network of scientific partners in Asia.

Mrs. Koike took her seat on the Foresight Committee at the first of its half-yearly meetings in 2015.

The half-yearly meetings of the Foresight Committee provide an opportunity for the Veolia Institute to:

- discuss foresight issues with invited experts,
- interact with the members to gain approval for ongoing projects.

In addition, it enables the Institute to incorporate new ideas into its work and extend its network of international partners.

FOCUS some of the experts attending Foresight Committee meetings since 2011

- **Salomon Chertorivski**, Minister of Health, Mexico (2011)
- **Jorge Castañeda**, former Minister of Foreign Affairs, Mexico (2011)
- **Brice Lalonde**, Executive Coordinator, UN Rio+20 Conference 2012 (2011)
- **Camilla Toulmin**, Director, International Institute for Environment and Development (2012)
- **Manish Bapna**, President, World Resources Institute (2012)
- **Julia Marton-Lefèvre**, Director General, International Union for Conservation of Nature (2013)
- **Lynn Scarlett**, Managing Director, Public Policy, The Nature Conservancy (2014)
- **Dr. Ramachandran**, former Secretary of India's Ministry of Urban Development, principal Adviser to the Skoch Development Foundation (2014)
- **Dr. S.K. Sarkar**, Distinguished Fellow of TERI, former Secretary of India's Ministry of Water Resources (2014)

The Foresight Committee's two half-yearly meetings in 2014 were held as follows:

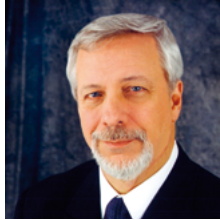
- On 31 May in Washington DC, USA, at the international Ecosystems Restoration Conference with Lynn Scarlett, Managing Director, Public Policy, of The Nature Conservancy (TNC) on the theme of Governance and Ecosystems Restoration. The Institute team made the most of the opportunity to set out the principal outcomes of the conference and to further explore the issue of governance.
- On 18 and 19 December in New Delhi, India, on the theme of Safe Drinking Water for the Urban Poor, which provided an opportunity to:
 - call on Indian experts: Dr. Ramachandran, former Secretary of India's Ministry of Urban Development and principal adviser to the Skoch Development Foundation; Dr. S.K. Sarkar, Distinguished Fellow of TERI, former Secretary of India's Ministry of Water Resources,
 - present the social challenges of Veolia's activities at the local level, including a contribution from Patrick Rousseau, CEO of Veolia India.

MEMBERSHIP OF THE FORESIGHT COMMITTEE



HARVEY FINEBERG

President of the Gordon and Betty Moore Foundation, former President of the United-States Institute of Medicine, former Dean of the Harvard School of Public Health.



PIERRE MARC JOHNSON

Lawyer and Physician, former Prime Minister of Quebec, Quebec's Chief Negotiator in Canada-Europe trade talks.



YURIKO KOIKE

Member of Japan's House of Representatives, former Minister for the Environment and former Minister of Defence.



PHILIPPE KOURILSKY

Biologist, Emeritus Professor at the Collège de France, Honorary Director-General of the Institut Pasteur, Member of the French Academy of Sciences.



MAMPHELA RAMPHELE

Physician and Anthropologist, former Managing Director of the World Bank, former Vice-Chancellor of Cape Town University.



AMARTYA SEN

Economist, Nobel Laureate 1998, Lamont University Professor and Professor of Economics and Philosophy at Harvard University, former Master of Trinity College, Cambridge.

The Veolia Institute has created and developed powerful tools for identifying, gathering, analysing, capitalising on and sharing information, all in the name of its core principle of environmental foresight. Thanks to these tools, the Institute represents a unique platform offering a forum for dialogue and an invitation to share knowledge and experience. Its aim is all the more pertinent in a world where intellectual approaches to science and the role of States,

citizens and consumers with access to new forms of expression are increasingly fraught with significance.

Through the work it carries out, with the support of the Foresight Committee, the Institute is keen to play its part in anticipating future developments and their potential impact on public policies, private initiatives and society as a whole.

Highlights of 2014

February

- **Signature of a three-year partnership agreement with the Agence Française de Développement (AFD)**, the highlight of which was collaboration on the Ecosystems Restoration Conference in the USA.
- Publication of a **FACTS Reports special issue on Haiti**.

March

- **Confirmation of associate partnerships with the Ecosystems Conference:** Conservation International, the World Resources Institute, the United Nations Convention to Combat Desertification and the Office for Cooperation with Civil Society Organisations of the French Embassy in the U.S., adding to the expertise and reputation of the Veolia Institute project.

April

- **Confirmation of an associate partnership with the Prince Albert of Monaco Foundation** on the Ecosystems Conference in Washington.

May

- **Participation in the Abu Dhabi Ascent Summit** from 3 to 5 May, the preparatory phase for the UN Secretary General's Climate Summit in New York in September.
- **The Institute's 8th international Conference**, on the theme of Ecosystems Restoration, held on 29 and 30 May at the U.S. National Academy of Sciences. A notable success, with 700 registered attendees, general satisfaction expressed by partners, speakers and participants, and a high profile.
- **Meeting of the Foresight Committee** in Washington DC on 31 May, on the same theme.

June

- **Meeting of the Institute's Board of Directors** and annual General Meeting on 20 June.

July

- **RAMSES project meeting** in Bilbao, on July 1-2: progress report on the RAMSES project on climate resilient cities and discussions with local urban authorities.



Valerie Hickey, Biodiversity specialist at the World Bank, Antoine Frérot, CEO of Veolia, Catherine Garreta, Head of External Relations & Partners, AFD, Harvey Fineberg, President of the U.S. Institute of Medicine part of the U.S. National Academies, Julia Marton-Lefèvre, Director General, IUCN, and Jean Pierre Tardieu, President of the Veolia Institute.



U.S. National Academy of Sciences building, Washington DC

Field Actions Science Reports

FACTS
Reports

Stories of innovative democracy at local level:
enhancing participation, activism and social change across the world
October 2014



Coordinated by Dorothée Guénehéux, Clara Bosco, Agnès Chamayou and Henri Rouillé d'Orféal

THE JOURNAL OF FIELD ACTIONS



August

- **Submission of an application for accreditation to the United Nations Framework Convention on Climate Change (UNFCCC)** in order to position the Institute within the civil society network at the 2015 COP21 in Paris.

September

- **Seminar on Haiti** in conjunction with the Fondation de France in Paris on 19 September, following on from the publication of a FACTS Reports special issue on Haiti.
- **The Veolia Institute Managing Director becomes a member of the National Research Council Water Science and Technology Board**, part of the U.S. National Academies, with its first meeting in Washington DC on 27 September.

October

- **Participation in the Extreme Water Events** workshop in Oman, organised by the Veolia Foundation, on October 28-29.

December

- **Seminar building on the FACTS issue on Last-Mile Delivery** in conjunction with the Bel Group, at Veolia headquarters, on December 10.
- **Foresight Committee meeting in Delhi** on the theme of Safe Drinking Water for the Urban Poor, on December 18-19.
- **Changes to the Veolia Institute's team** with the appointments on December 22 of Dinah Louda as Executive Director and Nicolas Renard as Director of Foresight.

International Conference on Ecosystems Restoration

The international Conference programme acts as a moderator between multidisciplinary communities and a catalyst for new ideas, bringing together the latest knowledge and innovative practices to shed light on environmental issues.



Organised in conjunction with scientific or institutional partners, these events provide a forum for debate designed to raise awareness among academic circles, institutional organisations and civil society of the major problems ahead, and to offer suggestions for possible solutions. The programme of international “Future Environmental Trends” conferences is one of the Institute’s flagship activities. In addition to raising the profile and enhancing the reputation of the Institute, adding to its body of knowledge and increasing its circle of contacts, these forums also provide an invaluable opportunity to address a foresight issue in depth.

The 7th international Conference, on the theme of Ecosystems Restoration, proved to be the Institute’s keynote event of 2014, attracting 700 registered attendees, over 400 contributors and a group of eminent international partners.

The conference was organised around the theme of interactions between Ecosystems, Economy and Society and how large-scale restoration can stimulate sustainable development. It was designed specifically to identify exemplary best practices, technologies in development and emerging players. On a more general note, the conference sought to review current knowledge in the field of ecological engineering and skills, and the new activities emerging in the restoration of land-based, aquatic and marine ecosystems.

SIGNIFICANT PARTNERSHIPS

Under the extraordinary patronage of the U.S. National Academy of Sciences, the group of partners jointly organising the event was made up of the following key bodies:

- ▶ **the U.S. National Research Council Water Science and Technology Board**
- ▶ **the Agence Française de Développement, AFD**
- ▶ **the International Union for Conservation of Nature**
- ▶ **the World Resources Institute**
- ▶ **Conservation International**
- ▶ **the Prince Albert II of Monaco Foundation**
- ▶ **the United Nations Convention to Combat Desertification**
- ▶ **the Office for Cooperation with Civil Society Organisations of the French Embassy in the U.S.**



Professor Sen, Nobel Prize in Economic Sciences and Dr. Hornberger, Chair of the WSTB.



A plenary session highlighting case studies from China, France, Sahel and Indonesia.

Thanks to this collection of significant partnerships, the Institute was able to assemble an outstanding array of skills together with the most advanced and legitimate networks in support of the project, to stage a high-level international forum.

KEY FACTORS FOR SUCCESS

Other factors of note, in addition to the complementary strengths of the partners, included:

- ▶ the stimulating nature of the issue and the perfect timing in advance of COP 12 on Biodiversity in 2014, during implementation of the Aichi Targets and the Bonn Challenge and

part of the process of reflection on post-2015 and the definition of action-oriented Sustainable Development Goals;

- ▶ a dense programme built around diagnostics of the scientific issues and the state of the art, and case studies in the field;
- ▶ the quality of the speakers, including influential figures, Nobel laureates, eminent scientists and renowned practitioners and specialists. In total, the event featured 52 acknowledged international experts from 15 different countries (see below);
- ▶ the iconic setting of the National Academy of Sciences, an emblem of scientific excellence.

FOCUS some of the Conference speakers

- ▶ **Monique Barbut**, United Nations Convention to Combat Desertification
- ▶ **Braulio Dias** represented by David Cooper, Convention for Biological Diversity (CBD)
- ▶ **Anne Castle**, U. S. Department of the Interior
- ▶ **Antoine Frérot**, Veolia
- ▶ **K.L. Heong**, Centre for Agricultural Bioscience International (CABI) South East Asia
- ▶ **Valerie Hickey**, World Bank
- ▶ **Georges Hornberger**, U.S. National Research Council, Water Science and Technology Board
- ▶ **Clive Jones**, Cary Institute of Ecosystems Studies
- ▶ **Julia Marton-Lefèvre**, International Union for Conservation of Nature
- ▶ **Mauricio Moura-Costa**, BVRio, Brazil
- ▶ **Lynn Scarlett**, The Nature Conservancy
- ▶ **Fred Sklar**, South Florida Water Management District
- ▶ **Amartya Sen**, Economist, Nobel Prize Laureate 1998
- ▶ **Andrew Steer**, World Resources Institute
- ▶ **Mary Wagner**, U.S. Department of Agriculture

CASES STUDIES FROM VARIOUS COUNTRIES



INVOLVING A DIVERSITY OF STAKEHOLDERS



Objectives

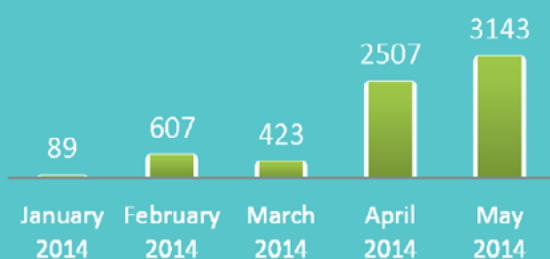
Discuss the potential of large-scale ecosystem restoration to :



- ✓ open up new economic avenues
- ✓ generate positive social impacts
- ✓ increase landscape resilience

www.ecosystems-economy-society.org

Conference website visitors per month



+ 6 750
users

+ 30 000
pageviews

Participants



700
registrants

7 out of 10 attendees
are American



400
attendees



52
speakers



15
countries



@EnvirTrendsConf
Followers **x 2**
during the Conference

SHARING SOLUTIONS

The Conference provided an opportunity to put forward solutions designed to mitigate damage to the environment and measure the costs of implementation. Featuring presentations of projects from all over the world, the forum contributed to public debate by detailing leading-edge scientific knowledge, private sector practices, unresolved issues to be included in the debate, successful achievements and work in progress. The following were some of the key messages that emerged:

- ▶ Restoration offers solutions for repairing the functions of damaged ecosystems, and the technology required to do so is already available. It is no substitute, however, for avoiding degradation in the first place and promoting the sustainable management of ecosystems and natural resources.
- ▶ On a global scale, the needs for restoration are vast, but restoration cannot be cost-effective in all situations. Priorities and targets need to be established. So yes to restoration, but for what purpose?
- ▶ The engineering and technology, as well as solutions drawn from nature, already exist. Their large-scale implementation and deployment involves costs that reflect the scarcity of resources.
- ▶ Restoration is costly in the short term but the return on investment comes in many forms, whether in terms of economic opportunities, income and job creation, adaptation to climate change, the resilience of food systems, or improvements to living standards and quality of life.

- ▶ Two levels are key: local, involving communities and individuals, and government level, to guarantee the conditions for implementation and the framework for action.
- ▶ Restoration is a relatively new discipline and large-scale restoration even more so. Lessons will need to be learned from past errors and successes in order to fill in the gaps that remain and meet the challenges that lie ahead (governance, metrics, long-term financing, knowledge, engineering, etc.).

“ A comprehensive and large-scale approach to land recovery can create new jobs, business opportunities and livelihoods, allowing populations to not only survive, but thrive. ”

Ban Ki Moon,
UN Secretary General, on June 17, 2014

- ▶ Improving on capitalisation is a key factor. The sheer complexity of the interdependencies involved calls for further research, multi-player collaboration and a firm alliance between all the stakeholders.
- ▶ Restoration is just one illustration of the convergence of environment and development priorities, confirming the fact that the major challenges facing humanity cannot be dealt with piecemeal.

AGENDA FOR 2015

Post-conference work will pursue two avenues:

> Continuing deliberations on ecological engineering

and restoration/pollution recovery techniques with a network of international experts set up for the purposes of the conference.

> Securing the future of partnerships through new joint projects

with:
- The Water Science and Technology Board (WSTB). The Institute, in the person of its Managing Director, was invited to join the members of the WSTB at the end of 2014, an exciting opportunity to continue

collaborating in 2015 with the leading American experts on aquatic ecosystems management and restoration.

- The Agence Française de Développement, AFD, particularly with a view to the forthcoming COP21.

Two highly respected journals

FACTS Reports and S.A.P.I.E.N.S are online journals that act as platforms for the dissemination of knowledge, with an additional focus being the creation of links between the scientific/academic community and those working in the field.



FACTS Reports

BOTTOM-UP POSITIONING

FACTS Reports is a bottom-up initiative that reports on the experiences and acquired knowledge of those working in the field, such as members of NGOs, and helps disseminate them more effectively. In so doing, the Institute has created a tool that serves simultaneously to identify emerging practices from local actors, who are closest to the concerns and needs of the populations they work with, and to forge links with key stakeholders, including non-profits and community agencies.

Designed initially as a platform for gathering and sharing field experience on economic and human development projects, the journal struck out in two new directions at the end of 2014:

- **Scope:** FACTS is now aiming for a broader approach than in the past to problems of the environment and society, and seeking to address, for example, issues such as the implementation of environmental solutions;
- **Targets:** FACTS is aiming for an even greater diversity in outlooks and feedback, to compare and contrast the perspectives of NGOs with those of field operators and micro-entrepreneurs and thus better reflect the diversity of actors involved at the local level.

DEVELOPMENT AND SPECIAL ISSUES IN 2014

Three special issues were published:

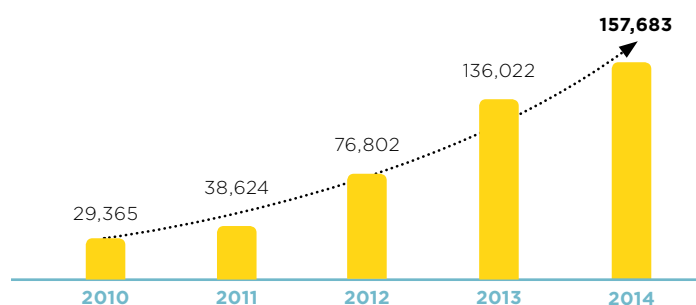
- **“Local democratic innovation”**, produced in collaboration with CIVICUS, the World Alliance for Citizen Participation. The issue addresses a wide range of key sectors for governance and social change, such as young people’s rights, participative processes for the allocation of local authority budgets, conflict resolution in agro-pastoral activities, synergies between the players (public, private, institutional, non-profits, citizen groups, media) in public decision-making. The issue is equally diverse in terms of the geographic scope of the experiences reported: Argentina, the USA, Portugal, Italy, France, Madagascar, Niger, Togo, Uganda, Armenia, India, China.
- **“Last-Mile Delivery”** addresses the vexed question of the final stage in bringing development aid services such as medicines, water and food, to the most remote end-users in the market. The issue comprises eight articles that recount the efforts of various businesses and NGOs to reach out to the most deprived urban or rural populations through specially designed distribution channels, microfranchises, the development of training, professional and social insertion, or support for entrepreneurship.
- **“Haiti”** and the memory of development. This partnership with the Fondation de France resulted in an excellent online publication comprising 21 articles on Haiti, focusing on committed and long-term initiatives in the wake of the earthquake.



TOP 3 ARTICLES FOR 2014 (IN PDF PAGE VIEWS)

- 1 **The Role of Community Radio in Livelihood Improvement: The Case of Simli Radio**
Al-hassan et al (2011)
- 2 **Challenges of Agricultural Adaptation to Climate Change in Nigeria: a Synthesis from the Literature**
Enete/Amusa (2010)
- 3 **Carbon Intensification and Poverty Reduction in Kenya: Lessons from the Kenya Agricultural Carbon Project**
Tennigkeit et al (2013)

INCREASE OF WEBSITE TRAFFIC (NUMBER OF UNIQUE VISITORS/YR)



Increasing traffic in 2014, to reach more than **157,000** unique visitors and **625,000** page views.

These latest special issues, along with other articles published along the way, takes the number of articles currently published on the FACTS Reports website to over 250. The journal continues to progress and we are convinced it has enormous future potential.

SEMINARS REPORTING ON AND PROMOTING THE SPECIAL ISSUES

To promote these publications, and spotlight those who contributed to them, the Institute has introduced a series of seminars aimed, as always, at capitalising to the maximum on its work and encouraging interaction between all concerned.

Two seminars were held in the second half of 2014, at Veolia headquarters in Paris.

- The first of these, on 19 September, focused on the FACTS Reports special issue "Haiti - local innovation, key to sustainable and inclusive development in Haiti", in partnership with the Fondation de France and with Haitian and French players involved in the project. The day of presentations and discussions attracted close

to 120 participants, and provided a platform for NGOs and sponsors of innovative projects for access to drinking water, agriculture, health or education, in the presence of expert development agencies (AFD, GRET, ACTED, ANR, etc.). The seminar gave centre stage to the authors of the special issue and brought together the major players engaged in issues of public interest in Haiti.

- On 10 December, the Institute organised a seminar in conjunction with the Bel Group on "Last-mile delivery and the informal sector" and on the FACTS special issue on the same subject. The seminar was made up of two roundtables: "Inclusive distribution in emerging countries: issues and innovative strategies" and "Innovation in France". Over 100 participants from 50 different organisations (Bel Access, VEDIF, Grameen, Emmaüs, ADIE and more) spent a highly productive morning addressing the issue of "the last mile", a crucial factor in the provision of goods, services and more, to promote the economic and social inclusion of the most deprived populations.

AGENDA FOR

2015

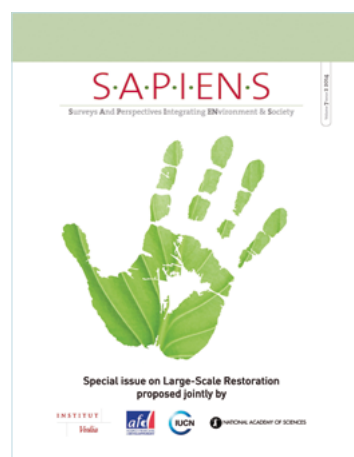
> Continue reporting results and highlighting published articles, in France and internationally.

> Publication of a special issue

On the theme of "Migration and Health", with the assistance of David Ojcius, Professor at the University of California Merced.

> Developing the journal by addressing new themes

- Social acceptability of major infrastructure projects
- Smart Cities
- Decentralised electrification in emerging and developing countries, in partnership with the Foundation for International Development Study and Research (FERDI).



S.A.P.I.EN.S

MULTIDISCIPLINARY POSITIONING

The complexity and interdependence of environmental, social and economic issues means that every effort must be made to promote dialogue between disciplines.

S.A.P.I.EN.S was launched in 2007 on the premise that a global and integrated approach to scientific knowledge is essential in response to the issues of sustainable development.

While continuing to publish ad hoc articles on topical issues, S.A.P.I.EN.S is establishing its reputation primarily by developing strong, high profile editorial partnerships and the publication of jointly authored special issues. Thanks to this unique modus operandi, S.A.P.I.EN.S offers its partners a purpose-built knowledge capitalisation tool and an invaluable platform for sharing and exploiting knowledge.

The key features of S.A.P.I.EN.S are:

- ▶ It primarily publishes **critical review articles**, promoting a **multidisciplinary** approach;
- ▶ Articles are subject to **peer review**, ensuring the quality and scientific objectivity of the journal's content;
- ▶ Its **Open Access** status ensures the content is freely accessible to everyone;
- ▶ It is published **online**, for ease of circulation.

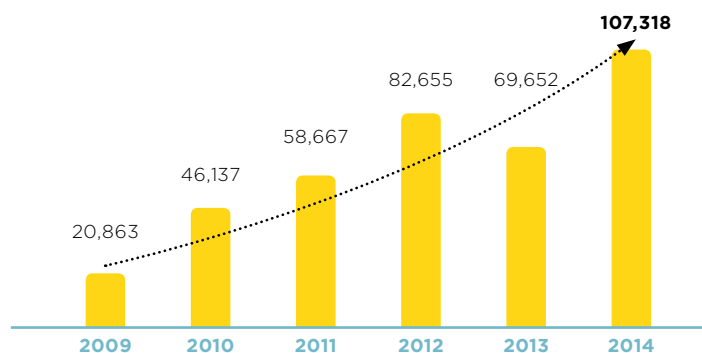
ARTICLES FROM THE S.A.P.I.EN.S SPECIAL ISSUE ON "ECOSYSTEMS RESTORATION"

- ▶ The State of United States Aquatic Restoration, Siobhan Fennessy and Jeffrey Jacobs
- ▶ 300,000 Hectares Restored in Shinyanga, Tanzania — but what did it really take to achieve this restoration?, Edmund Barrow
- ▶ CASE STUDY: Community Based Ecological Mangrove Rehabilitation (CBEMR) in Indonesia, From small (12-33 ha) to medium scales (400 ha) with pathways for adoption at larger scales (>5,000 ha), Ben Brown, Ratna Fadillah, Yusran Nurdin, Iona Soulsby and Rio Ahmad
- ▶ Participatory governance of Marine Protected Areas: a political challenge, an ethical imperative, different trajectories, Senegal case studies, Marie-Christine Cormier-Salem
- ▶ Restoration of rice landscape biodiversity by farmers in Vietnam through education and motivation using media, K.L. Heong, M.M. Escalada, H.V. Chien and L.Q. Cuong
- ▶ Oregon's Restoration Economy: How investing in natural assets benefits communities and the regional economy, Cathy P. Kellon and Taylor Hesselgrave
- ▶ A 10-year ecosystem restoration community of practice tracks large-scale restoration trends, Robert Daoust, Terry Doss, Mark Gorman, Matt Harwell and Cheryl Ulrich
- ▶ Transborder Drylands Restoration: Vision and Reality After Three Decades of Innovative Partnerships on the U.S.-Mexico Border, Tom Barry

TOP 3 ARTICLES FOR 2014 (IN PDF PAGE VIEWS)

- 1 **Sustainable energy for developing countries**, Ahuja/Tatsutani (2009)
- 2 **Green urbanism: formulating a series of holistic principles**, Lehmann (2010)
- 3 **Methods for visual quality assessment of a digital terrain model**, Podobnikar (2009)

INCREASE OF WEBSITE TRAFFIC (NUMBER OF UNIQUE VISITORS/YR)



In 2014, **increasing traffic** despite a fewer number of new articles, to reach more than **107.000 unique visitors and 472.000 page views**.

INCREASING EMPHASIS ON THEMED ISSUES

The journal is increasingly focusing on bringing out special issues, in addition to articles published along the way. Following on from the special issue on climate resilient cities in support of Europe's RAMSES project, the 2014 edition was devoted to large-scale ecosystems restoration, as part of the Washington Conference organised by the Institute in May (see articles on the opposite

page). This latest issue was co-authored by all the Conference partners: the U.S. National Academy of Sciences, the Agence Française de Développement (AFD) and the International Union for Conservation of Nature.

The aim was also to increase the interconnections between the Institute's various instruments, and to stimulate mutual enrichment, whether in terms of content or of the experts called upon to contribute.

AGENDA FOR

2015

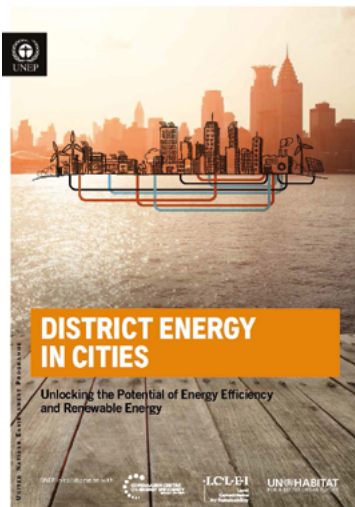
> Preparing a special issue on pollution recovery, continuing the theme of the Ecosystems Restoration Conference.

> Establishing a structural partnership anchoring the journal to a leading scientific organisation with cutting-edge multidisciplinary

expertise to continue promoting integrated knowledge and to leverage the impact of S.A.P.I.EN.S.

Foresight studies

The Institute works closely with its international network of partners to develop studies exploring major changes on the horizon, pursuing a collaborative approach based on interactions with researchers and investigations into constantly evolving issues.



Sustainable cities, resilient cities

Over the course of several successful past collaborations — with the College of Europe on GHG inventory tools at the European level, with UNEP on assessment of urban environmental performance, and with partners in Europe's RAMSES project on the climate resilience of urban infrastructure — the Institute has developed a network of expertise. Interaction with these partners is ongoing, in order to build on previous progress and to explore new issues.

BUILDING ON PROGRESS

UNEP invited the Institute to assess the draft report on “District Energy in Cities: Unlocking the Full Potential of Energy Efficiency and Renewable Energy”. Publication was finalised in September 2014 by UNEP in collaboration with the Copenhagen Centre on Energy Efficiency (C2E2), ICLEI (Local Governments for Sustainability) and UN-Habitat.

The Veolia Foundation also invited the Institute to speak on the theme of urban infrastructure resilience at its October colloquium in Oman on urban resilience to risks of flooding.

RAMSES PROJECT

In 2014, the RAMSES European research project on urban climate resilience accounted for the lion's share of the Institute's work on foresight studies.

The RAMSES project (2012-2016) was initiated to develop new methods for quantifying the impact of climate change and to put forward a rigorous, pragmatic and standardised framework for the implementation of adaptation strategies in EU cities. Based on analysis of a number of case studies (London, Bilbao, Antwerp, Bogota), RAMSES set out to catalogue an extensive range of potential impacts and identify the key contributors to urban vulnerability, particularly for inland cities. The project is working on establishing a library of impact functions that will form the basis for subsequent cost-benefit analysis models.

From the project's inception, the Veolia Institute was the main partner responsible for work on indicators and for a comparative study of the vulnerability and capacity for adaptation of urban infrastructure. In 2013/2014, at the request of the city of Bilbao (one of the project case studies), the Institute conducted an analysis of the city's risk management resources and its development plan, as part of a review of urban development planning. The objective was to identify the risks of natural disasters, the indicators used and the measures taken to mitigate those risks considered as major. The results were presented in April 2014 to the Bilbao municipal authorities, who confirmed the pertinence of the analysis and expressed considerable interest in the working proposals made, particularly on

developing a process of consultation between urban infrastructure operators.

The Institute's latest contribution to RAMSES involved analysis of potentially appropriate indicators for assessing urban infrastructure resilience, addressing:

- ▶ existing indicators;
- ▶ a better understanding of the interdependence of urban networks;
- ▶ new approaches and indicators currently being developed by the scientific community.

The Institute was involved in the project, which brought together fourteen partners under the FP7, from 2012 to the end of 2014.



Strategic raw materials

The Institute is also extending its foresight exploration to other environmental issues such as the availability of strategic raw materials.

Discussions have been held with Olivier Vidal, CNRS Director of Research at the Grenoble Institute of Earth Sciences, who was particularly keen to share his analysis of the scale of future needs for essential structural materials and minerals, especially for construction of the energy generation infrastructure that will be essential for energy transition.

Olivier Vidal is coordinator of ERA-MIN, the network for the European non-energy mineral raw materials research community. The network also steers a number of scientific projects, including one on energy transition, involving geologists, materials researchers, process engineers, economists and researchers in human and social sciences.

The institute was also invited to take part in:

- ▶ the CNRS winter school on the science of energy scenarios, held in Les Houches in February 2014;
- ▶ the annual conference of the ERA-Min European network, on strategic materials and the future of the mining industry, held in March 2014.

AGENDA FOR

2015

> Capitalisation

The Institute will continue to share the results of its work for RAMSES within its networks (partners, Veolia staff, urban service operators).

> Further work

In the interests of cross-fertilisation, as ever, the Institute will deploy its other tools (publications, conferences) to explore further the theme of urban resilience.

Distinctive positioning for COP21



The 21st Conference of the Parties to the United Nations Framework Convention on Climate Change – COP21 – will bring together heads of government, scientists, NGOs, city mayors, private firms, students and numerous representatives of civil society from all over the world. This will be a crucial conference, as it needs to achieve a new international agreement on the climate, applicable to all countries, with the aim of keeping global warming below 2°C.

COP21 is the largest diplomatic event ever hosted by France and one of the largest climate conferences ever held. The UNFCCC has named the mobilisation of non-governmental players as one of its stated priorities, to encourage the participation of civil society and promote an agenda of solutions complementing the commitments given by States. The aim will be to encourage the emergence of concerted action on a scale commensurate with the climate challenge.

Since 2014, the Veolia Institute has therefore concentrated part of its activities on preparing for this supremely important event.

Accreditation to COP21

As was the case at the UN Rio+20 Conference in 2012, the Veolia Institute is keen to make the most of its status as a think-tank to participate as an independent member of civil society in events both official and non-official.



United Nations
Framework Convention on
Climate Change

The Institute was granted official accreditation by the United Nations General Assembly to Rio+20 and is now a member of the “civil society” network of the United Nations Department of Economic and Social Affairs on the strength of its contributions to sustainable development issues. The procedure for COP events is similar, but does not follow automatically, and the Institute therefore submitted its application for accreditation in August 2014. Provisional admittance was granted mid-2015. The formal admission of new observer organisations will be decided by the COP.

Accreditation will entitle the Institute, in addition to its NGO observer status, to organise side-events at the official climate negotiations venue – an opportunity to take its messages directly to decision-makers.

Distinctive positioning on methane mitigation

In its role as a facilitator between communities and a catalyst for foresight thinking, the Veolia Institute intends to make the most of this historic international gathering by offering a platform for sharing knowledge and best practices on methane mitigation.

Methane is a greenhouse gas second only to carbon dioxide in its contribution to climate change. It has a short lifespan in the atmosphere (12 years – source: IPCC report, 2013), hence its global warming potential (GWP) varies considerably according to the timescale chosen. Reducing the time horizon from 100 years to 20 would immediately treble the GWP of methane. It is therefore an issue of considerable importance, global in scope; understanding it better could lead to significant results in terms of GHG reductions in both northern and southern hemispheres, while not diminishing the need to reduce CO₂ emissions.

A two-stage project

The Institute is keen to leverage its capacity for mobilisation to raise wider awareness of the issue of methane, still largely overlooked in the battle to reduce GHG emissions. Its contribution will fall into two parts:

An international Conference on the subject of methane to be held in Paris at the French Economic, Social and Environmental Council in Paris on 9 November, ahead of COP21.

The Veolia Institute aims to present state of the art scientific knowledge on this short-lived pollutant, share concrete, innovative solutions for reducing emissions – echoing the UNEP CCAC Initiative – and highlight the financial mechanisms available for their large-scale deployment.

The Conference will be an opportunity to raise awareness of the importance for the climate of action on methane by sharing information on:

- ▶ scientific knowledge on methane emissions and the medium- and long-term benefits of immediate action;

- ▶ the choice of a more appropriate time horizon for calculating the global warming potential (GWP) of methane;
- ▶ the main methane-generating sectors (domestic livestock/ rice cultivation, oil & gas, landfill) and trends in their emissions;
- ▶ existing techniques and solutions already available (and economically viable) for reducing sector emissions;
- ▶ innovative initiatives for their deployment on a wider scale;
- ▶ business and financing models and the regulatory conditions to encourage development of these solutions;
- ▶ other potentially significant sources to be taken into account (e.g. expected thawing of permafrost) in the context of climate change.

A side-event will be organised to report the conclusions of the Conference during COP21 at the official conference site in Le Bourget or in the Climate Generations space.

FIND OUT MORE:

www.conference-methane.org

AGENDA FOR

2015

> The Institute will continue to work on the issue of methane in preparation for COP21, with the aims of:

- Calling on high-profile partners;
- Obtaining official COP21 accreditation by the French government for the event;
- Reporting key messages during the COP: within the official negotiating arena and in the space set aside for exchange with key players in civil society;
- Bringing together leading experts to advance knowledge and create a better understanding of the issues and potential solutions for mitigating methane emissions;
- Confirming its position as an NGO with observer status and securing its future participation in UN events.

2015 calendar

January

- ▶ Presentation of FACTS Reports to the “Alliance Sciences Société: a new democratic imperative” colloquium in Paris.

February

- ▶ Participation in the Delhi Sustainable Development Summit in India.

April

- ▶ Publication of a FACTS Reports special issue on Migration and Health.

June

- ▶ Foresight Committee meeting in Prague;
- ▶ Meeting of the Board of Directors and annual General Meeting.

October

- ▶ Meeting of the Members of the U.S. National Research Council Water Science and Technology Board;
- ▶ Organisation of a colloquium with the Economist Olivier Godard on “Ethics, Justice and Market” at Veolia headquarters.

November

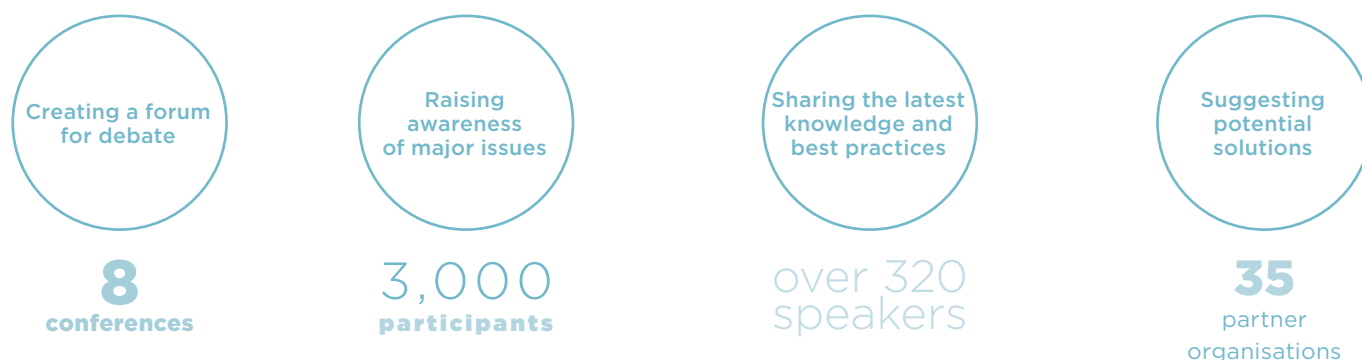
- ▶ The Veolia Institute international Conference, “Mitigating methane emissions: from science to innovative solutions” in Paris, a contribution to the COP21.

December

- ▶ Half-yearly meeting of the Foresight Committee in Paris;
- ▶ At COP 21, a side-event on methane organised by the Institute at Le Bourget.

Key figures from 2001-2014

HIGH-LEVEL INTERNATIONAL CONFERENCES



PARIS BANGALORE BEIJING WASHINGTON DC
TOULOUSE MONTREAL RIO DE JANEIRO

FORESIGHT STUDIES

A cutting-edge instrument for further investigation of issues selected as priorities. Some examples:

FOCUS ON CITIES

- ▶ “Comparative Analysis of Local GHG Inventory Tools” with the College of Europe
- ▶ “Framework Elements for Assessing Urban Environmental Performance” with the United Nations Environment Programme (UNEP)
- ▶ “Urban Infrastructure Climate Resilience” with the RAMSES European project

FOCUS ON LEGITIMACY

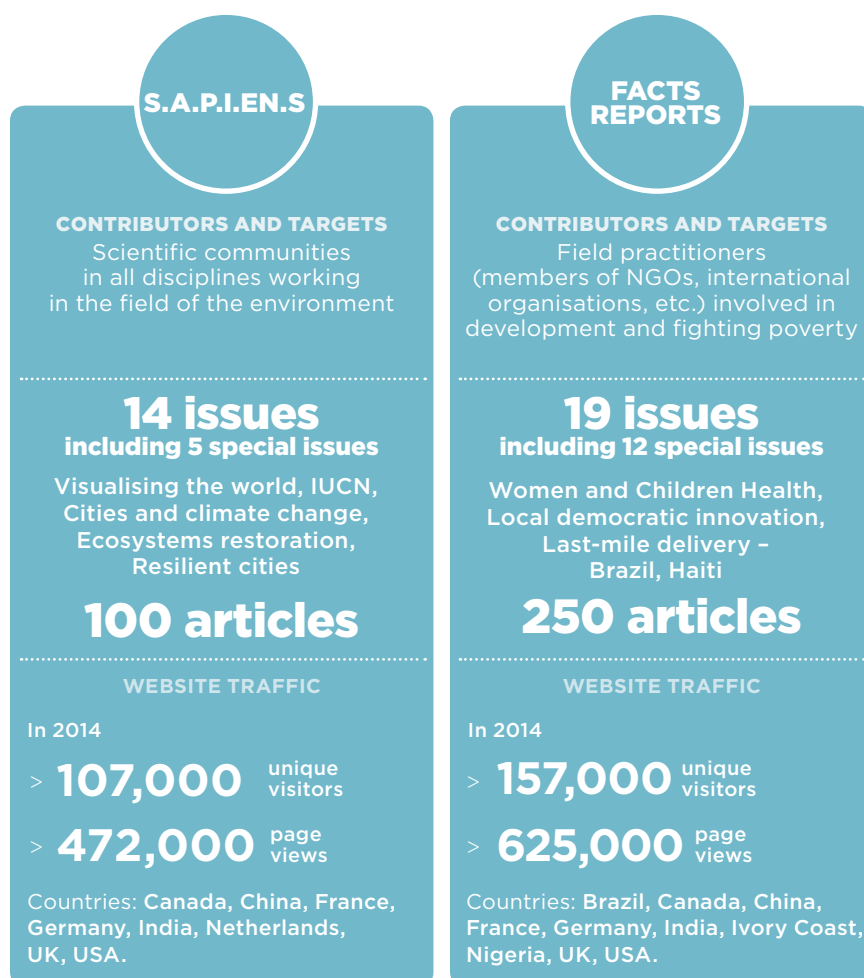
- ▶ “Public-Private Partnerships” with IDEI
- ▶ “What legitimacy for a private firm providing public services?” with O. Godard, Ecole Polytechnique.

FOCUS POVERTY AND ESSENTIAL SERVICES

- ▶ “Indoor air pollution and health of rural households in India” with JPAL, MIT
- ▶ “Access to essential services” with IDDRI
- ▶ “Poverty-Environment”, with TERI India, Peking University, or the Agence Française de Développement

JOURNALS

PLATFORMS FOR IDENTIFYING AND GATHERING GROUNDBREAKING KNOWLEDGE AND CREATING NETWORKS



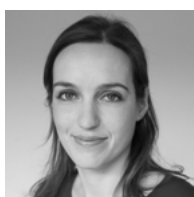
The team

The Institute would like to express its warmest thanks to: Georges Valentis, who helped build and develop it from the outset in 2001, and Gaëll Mainguy who, in 2006, brought new energy to developing its editorial and scientific activities. Both moved on to new professional horizons at the end of 2014 and we wish them every success for the future.



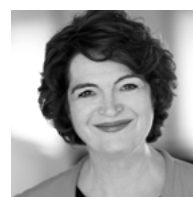
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The Institute would also like to thank:

- **Angèle BEAUVOIS**, Intercultural Management Programme, ISIT
- **Irène GARCIA GARCIA**, Master's in Governing the Large Metropolis, Urban Affairs, Sciences-Po Paris



With the aim of disseminating knowledge and serving as a platform for exchange,
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Analysis, anticipation, dialogue

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