

Analysis, anticipation and dialogue ACTIVITY REPORT 2010/2011

INSTITUT

Veolia Environnement



> Introduction

- p. 2 Editorial dialogue between Jean Pierre Tardieu and Georges Valentis
- p. 4 The Institut Veolia Environnement in detail
- p. 8 Highlights of 2010

> Three tools serving three ambitions: analysis, anticipation and dialogue

- p. 10 An innovative editorial policy: S.A.P.I.EN.S and FACTS Reports
- p. 16 Multidisciplinary discussion platforms: the International Conferences
- p. 20 Research partnerships: foresight studies

> Outlook

p. 23 Highlights of 2011



Editorial dialogue

between

Jean Pierre Tardieu, President



In 2010, the Institut Veolia Environnement refocused its work around three new, crosscutting orientations. What prompted the change?

While the driving purpose of the Institut Veolia Environnement remains unchanged, i.e. to arrive at a better understanding of the changes taking place at the interface between society and the environment, its perspectives have shifted somewhat. As events on the global geopolitical stage in the early months of 2011 have shown, sustainable development is not linear, and neither is the Institut Veolia Environnement! Since 2001, the Institute has constantly sought to adapt its thinking to the shifting realities of its areas of study: increasingly complex subjects, the diversification of players, the need for global and local responses etc. That is why we have now refocused our attention on three key priorities: global management of the environment and ecosystems, the expectations of society and the public as end-users of sustainable development, and evaluating the performances of sustainable development. Concentrating on these three priorities will sharpen our ability to analyse and predict the long-term future, which has been the approach and the defining characteristic of the Institute since its founding.

Why is it necessary to look to the long term?

Looking to the long term is essential in order to offer insights and sustainable solutions in the public interest, especially since temporal references are changing faster than ever in today's world. The added value of the Institut Veolia Environnement lies in its ability to discern far-reaching social and environmental changes from the general background noise. Its role is to give a voice and an identity to the burgeoning issues



and

Georges Valentis, Managing Director



inspiring scientists and field practitioners, and then to galvanise these networks so as to benefit from their expert understanding of the complex issues involved. The Institute is in a position to attract the foremost external experts working at the cutting edge, thanks to the credibility it enjoys as a result of its freedom to decide the direction of its work, a guarantee of rigour, quality and transparency crucial in accomplishing the mission entrusted to it by Veolia Environnement.

What sets the Institut Veolia Environnement apart?

There are few structures in the world today, we believe, that enjoy a positioning comparable to that of the Institut Veolia Environnement, exploring crosscutting fields of study on a global scale - the scale on which the issues of sustainable development, by their very nature, are played out. The Institute is both international and crosscutting: international in its governance, in the diversity of its stakeholders, in its fields of study and in its tools; crosscutting in the network of multidisciplinary researchers it has built up, in deliberate opposition to the traditional silos that operate within the scientific community. Crosscutting also in extending its scope to encompass development players operating in the field, using their social and economic insights to supplement objective scientific analysis. These two networks are vital sources of signals suggesting where the world may be heading in the future, signals that enrich the contribution the Institut Veolia Environnement has to make.

It is this unique position at the interface between researchers, field practitioners and the company responsible for its creation that makes the Institute such a singular platform. Thanks to the cross-fertilisation between contributions from all its stakeholders, the Institute aims to anticipate future changes and their impacts on government policy, private initiatives and society as a whole.



The Institut Veolia Environnement in detail

In carrying out its foresight missions, the Institut Veolia Environnement relies on carefully balanced governance provided by a well-rounded Board of Directors and an illustrious Foresight Committee that supports the operational team in determining its annual programme, evaluating the quality of its work and extending its network of partners.

Date of creation: 2001

Status: Non profit organisation (under French law 1901)

Funding: Veolia Environnement, Veolia Energy, Veolia Water,

Veolia Environmental Services, Veolia Transdev

Location: Paris, France

Team: 6 persons

Members of the foresight committee



Hélène Ahrweiler
Historian,
President of the University
of Europe,
Former Rector of the
Paris Academy,
UNESCO Human and
Social Sciences expert.
France



Harvey Fineberg
President of the United
States Institute of
Medicine,
Advisor to the World
Health Organisation,
Former Dean of the
Harvard School of
Public Health.
USA



Pierre Marc Johnson Lawyer and Physician, Former Prime Minister of Quebec, Quebec's Chief Negotiator in Canada-European trade talks. Canada



Organization

> The Board of Directors

Members include senior management representatives of Veolia Environnement, independent experts known for their skills in the Institute's fields of work, and members of the Institute's Foresight Committee. Its composition is designed to ensure balanced representation of all the interests involved in order to facilitate the decision-making process.

The Foresight Committee plays a pivotal role in the Institute and underwrites its scientific credentials

The breadth and diversity of knowledge embodied in the Foresight Committee's seven members, all prominent members of the international academic and institutional world, brings to the Institute the qualified, multidisciplinary outlook essential to ensure a systemic and multidimensional approach to foresight reflection on the environment.

The role of the Foresight Committee is threefold:

- to participate in determining the main orientations pursued by the Institut Veolia Environnement and in establishing its annual programme of work;
- to oversee the quality of work carried out by the Institute:

• to act as a guarantor of intellectual independence, a sine qua non in attracting the most respected scientific experts. The international reputation of Foresight Committee members is also instrumental in expanding the network of partners who support the work of the Institut Veolia Environnement.

Founded in 2001 with an initial complement of five leading figures, since increased to seven members, the Foresight Committee is thus an invaluable source of regulation, dialogue and mutual enrichment underpinning the quality of the work carried out by the Institut Veolia Environnement

> The Institut Veolia Environnement's team (see page 24)

Led by Managing Director Georges Valentis, supported by scientific advisor Philippe Kourilsky, the executive team of the Institute has two main responsibilities: firstly to identify priority themes, and the leading scientific experts and most innovative contributors in the field in each case, and secondly to disseminate the latest knowledge and the most repeatable field practices in each of the key orientations defined. 2010 saw Christine Rodwell, a former journalist and head of media NGO Reporters of Hope (Reporters d'Espoirs), join the team as director of FACTS Initiative.



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



Rajendra K. Pachauri Director-General of the Energy and Resources Institute, Chairman of the Intergovernmental Panel on Climate Change (Nobel Peace Prize 2007). India

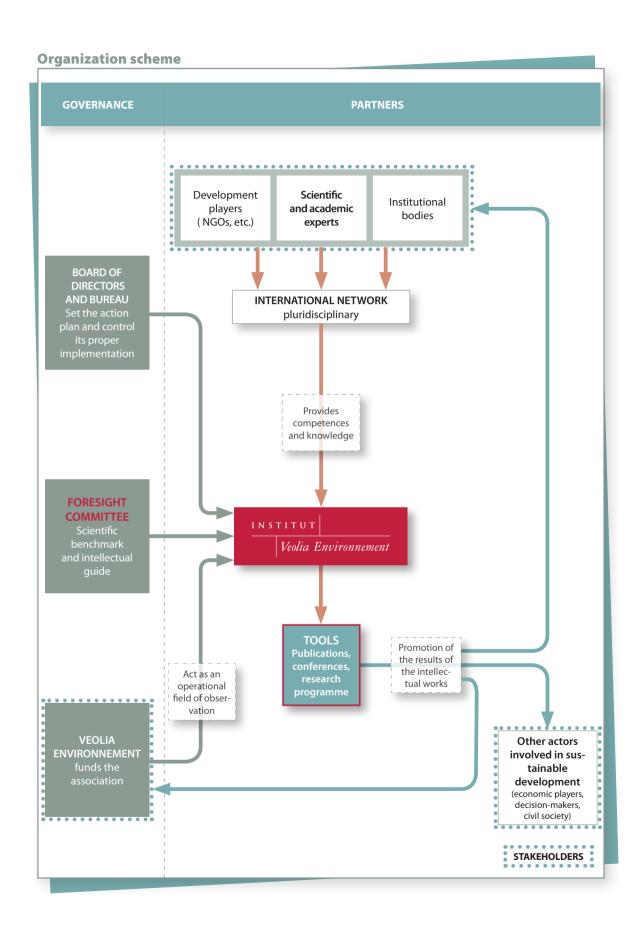


Mamphela Ramphele Physician and anthropologist, Former Managing Director of the World Bank, Former Vice-Chancellor of Cape Town University. South Africa



Amartya Sen Economist, Nobel laureate in 1998, Lamont University Professor and Professor of Economics and Philosophy at Harvard University, USA Former Master of Trinity College, Cambridge, UK. India







Main areas of research

Since its founding, the Institute has focused its attention on future interactions between the environment and society, in the knowledge that an understanding of the transformations to come can only be gained through a systemic and multidisciplinary approach. Its method relies on advancing by means of questioning and adjustment to constantly evolving challenges, rather than pursuing hard and fast answers. Its aim is to bring to bear a wide range of perspectives and knowledge in order to identify not only new constraints but also possible avenues of opportunity that will determine the future of the places and people engaged in sustainable development.

The Institute includes a number of different dimensions within the compass of its intellectual investigations:

- > the growing awareness of major natural and physical phenomena such as climate change or the finite nature of land and resources available;
- the major changes shifting the balance of the planet (globalisation and urbanisation) and their impacts on societies;
- > the expectations and needs of the world's populations, allowing for different educational, socio-economic and cultural contexts and practices;
- analysis and assessment scales, economic models, political or social regulations and standards.

Casting its investigative net across this wide spectrum enables the Institute to pick up signals that can contribute to an understanding of these major changes in all their different aspects.

In 2010, the Institute redirected the focus of its reflection and its active and analytical monitoring towards three priorities:

> Global management of the environment

What will the energy landscape (needs, resources, technologies) look like in the future? How can ecosystems be sustainable managed? What form of development will help to maintain biodiversity?

The expectations of the public, "end-users" of sustainable development

How can the roles and responsibilities of stakeholders be balanced? What economic models and regulatory methods can be applied to achieve a harmonious alignment of their societal, economic and environmental requirements?

"Sustainable development" approach: evaluating performance and indicators

What is a sustainable city? What indicators do we have for measuring its performance, and can this performance be compared against that of other cities? How does a private company take on board long-term objectives in the general interest? How is progress in this respect to be evaluated?

Acting as a platform

In order to achieve its objectives, the Institut Veolia Environnement has chosen to work closely with two extended networks that form the basis for its activities.

- ➤ A network of scientific partners from a broad range of disciplines (sociology, geography, health, economics, etc.) to which the Institute is ever looking to add, either by exploring new fields of research or by extending its geographic scope. The aim is to explore themes complementary to the Institute's central orientations and so diversify its investigations.
- > A network of development practitioners in the field, both governmental and non-governmental, whom the Institute is keen to support by promoting the transfer of knowledge and the sharing of best practices.

The Institut Veolia Environnement has developed three instruments designed to identify, attract and enrich this constantly evolving chain of skills and knowledge: an innovative editorial policy embodied in the S.A.P.I.EN.S and FACTS Reports journals, a series of international conferences, and research partnerships built around a programme of foresight studies.

The Institute has thus established itself as a platform unique of its kind, detecting and capitalising on reliable scientific information and proven field skills that can then be disseminated to all those, in both the public and private sectors, involved in investigating the interfaces between society and the environment.



Highlights of 2010

February 2010

> Presentation of the journal S.A.P.I.EN.S and of the report on estimating carbon footprints from household energy use in two cities, one in India and the other in China, as a side event to the Delhi Sustainable Development Summit (DSDS) organised by the TERI research centre in New Delhi (India).

March 2010

> First post-conference workshop in Beijing (China) on "Carbon Tax"; speakers included Ming Su (Ministry of Finance, China) and Guillaume Sainteny (Professor at the École Polytechnique).

April 2010

Contribution to scientific reviews under Open Access and presentation of S.A.P.I.EN.S at the Biovision congress "Paths and hurdles towards open science" in Alexandria (Egypt).

May 2010

Presentation of S.A.P.I.EN.S at the 16th international conference organised in Hong Kong by the International Sustainable Development Research Society, an association that promotes interdisciplinary research into sustainable development by researchers, governmental and non-governmental agents, and representatives of companies.

June 2010

- Meeting of the Board of Directors of the Institut Veolia Environnement in Paris.
- > Half-yearly meeting of the Foresight Committee in Delphi (Greece) with contributions from Andreas Papandreou (Professor, University of Athens) on the economics of climate change, from Gilles Kepel (Director, Middle East Chair, Sciences Po) on the role of the environment in the Gulf states, and from Nikki Goulandris (Chair of the Goulandris Foundation) on an historical approach to biodiversity in Ancient Greece.



Ming Su, Director of the Research Institute for Fiscal Science at China's Ministry of Finance, at the "Carbon Tax" workshop on 13th March.



The participants in the "Poverty and the Environment" workshop in July.

July 2010

> Second post-conference workshop in Beijing on "Poverty and the Environment" organised in collaboration with the International Poverty Reduction Center in China (IPRCC), which included a keynote speech by Martin Hirsch (Former High Commissioner for Active Solidarities Against Poverty and President of the Civil Service Agency).

September 2010

- > Seminar on "The future of carbon financing schemes for sustainable transport: Mumbai paves the way", held in Mumbai (India). Organised jointly by the Institut Veolia Environnement, IDDRI (Institut du Développement Durable et des Relations Internationales), Veolia Transdev, TERI (The Energy and Resources Institute) and TRL (Transport Research Laboratory).
- Presentation of S.A.P.I.EN.S at the "Third international colloquium on Sustainable Growth and Resource Productivity" organised by the Wuppertal Institute for Climate, Environment and Energy and held in Brussels (Belgium).

October 2010

- > Half-yearly meeting of the Foresight Committee in Paris, with two themes on the agenda: first poverty, with Martin Hirsch addressing the subject of "poverty in rich countries: the case of France", Laurence Fontaine, historian and research director at CNRS, speaking on "a comparative approach between past and present", and Eric Lesueur of Grameen Veolia, who reported on the entity's work in Bangladesh. The second theme addressed was the strategic challenges of new technology, with a speech from Gérard Berry, professor at the Collège de France.
- Third post-conference workshop in Beijing on the theme of "Sustainable Cities", including speeches by Zhong Ma, Dean, School of Environment and Natural Resources, Renmin University of China, Bharat Dahiya, Human Settlements Officer, Asia-Pacific Regional Office, UN-HABITAT, and Dimitri de Boer, head of the UNIDO China Office.

December 2010

Organisation of a side event on "The future of carbon financing schemes for sustainable transport" at the United Nations Framework Convention on Climate Change (UNFCCC) conference in Cancun (Mexico). The partners in the research project, which was launched in Mumbai in September, were chosen by the organisers to present their progress to date as part of the international climate change negotiations.



Representatives of BEST, the Mumbai bus network operator, at the September seminar.



Side event in Cancun, the speakers from left to right Jan Corfee-Morlot (OECD), Ronan Dantec (Nantes), Holger Dalkmann (TRL), Akshima Ghate (TERI), Gaëll Mainguy (Institut Veolia Environnement), Caroline Edant (Veolia Transdev) and Benoit Lefèvre (Iddri).

In pursuit of its task of promoting foresight reflection, descrying the outlines of the future and stimulating debate between the main players engaged in sustainable development, the Institut Veolia Environnement relies on three complementary approaches.

An innovative editorial policy

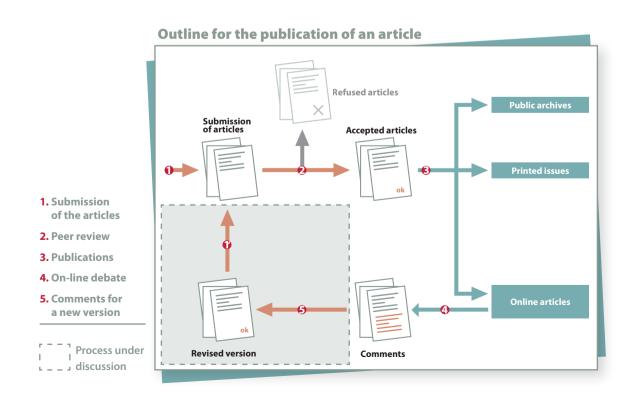
Proliferation is the common thread of the early 21st century, dominated by a burgeoning number of information sources, players and research centres involved in environmental and social issues. How are key elements to be discerned with any degree of confidence in this growing complexity? What templates can be trusted over time to cope with this acceleration in the dissemination of knowledge that is sometimes less than fully validated?

In answer to the strategic challenge of mastering information, in 2010 the Institut Veolia Environnement pressed ahead with the deployment of its two flagship publications, S.A.P.I.EN.S, a journal aimed primarily at the international scientific community, and FACTS Reports, dedicated to those working in the field.

While their targets may differ, the two publications share similar objectives.

Identify and circulate cutting-edge scientific knowledge and the most pertinent field practices in the sphere of sustainable development.

- Create an arena in which emerging ideas can be examined and compared in order to open the way for foresight reflection.
- > Forge networks of high-level experts readily available for consultation.
- Cross-reference different perspectives and pilot approaches to identify key issues for the future.





These two publications are also founded on **common operating principles** embraced by the Institut Veolia Environnement.

- The principle of peer review, the fundamental criterion of scientific publication.
- The principle of digested and sourced information, essential to ensure a high profile and win the adherence of an extensive international readership.
- The principle of free access, for both authors and readers, to encourage the dissemination of knowledge.
- The principle of online publication, supplemented by the annual publication of printed special issues.

S.A.P.I.EN.S

Three years on from launch, this scientific journal has succeeded in winning an audience despite a saturated academic publishing landscape, thanks to **a distinctive trademark:** publishing review articles that address environmental issues in a comprehensive way, unconfined by the habitual boundaries between disciplines.

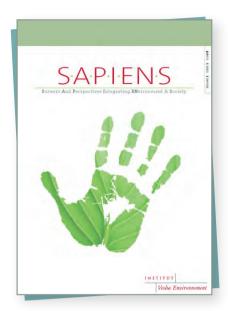
Hallmark of excellence, S.A.P.I.EN.S (Surveys And Perspectives Integrating Environment and Society) has since its founding enjoyed the support of a **particularly stable Editorial Board** representing the major disciplines and geographic regions (see below). That long-term commitment is all the more appreciable given that one member, Elinor Ostrom, professor at the University of Michigan, was awarded the Nobel Prize in Economics in 2009.

Editorial board S.A.P.I.EN.S

- Weber Amaral Brasil University of Sao Paulo
- > Bruce Beck USA University of Georgia, IIASA
- ➤ Paul-Marie Boulanger •
 Belgium Institute for
 Sustainable Development
- > Marie-Lise Chanin · France · Académie des sciences, CNRS
- Robert Costanza · USA · Gund Institute for Ecological Economics
- Maarten de Wit · South Africa · University of Cape Town, Africa Earth Observatory Network (AEON)
- > Harry Dimitriou United Kingdom • University College London, Bartlett School of Planning, The OMEGA Centre and the OMEGA Partnership Network
- Eric Duchemin · Canada · université du Québec à Montréal, VertigO
- > Howard Frumkin USA National Center for Environmental Health & Centers for Disease Control and Prevention (CDC)
- > Sébastien Gadal France université de Versailles Saint-Quentin-en-Yvelines

- > Olivier Godard France École Polytechnique, CNRS
- Axel Gosserie Belgium -University of Louvain, Fund for Scientific Research, Hoover Chair in Economic and Social Ethics
- > Minh Ha-Duong France Centre national de la recherche scientifique (CNRS), Centre international de recherche sur l'environnement et le développement (CIRED)
- > James K. Hammitt USA Economics and Decision Sciences Harvard University, School of Public Health
- Clive Jones USA Clary Institute of Ecosystem Studies
- ➤ Philippe Kourilsky France Académie des sciences, Collège de France
- Ragnar E. Lofstedt United Kingdom - School of Social Science and Public Policy King's College, King's Centre for Risk Management
- **> Tim Lynam** Australia CSIRO Sustainable Ecosystems
- ➤ Erwann Michel-Kerjean USA • Wharton School, Risk Management and Decision Processes Center

- > Elinor Ostrom USA Center for the Study of Institutions, Population, and Environmental Change (CIPEC)
- > Rajendra K. Pachauri India The Energy and Resources Institute (TERI)
- ➤ Daniel Schaffer Italy Abdus Salam International Centre for Theoretical Physics (ICTP) and Academy of Sciences for the Developing World (TWAS), Public Information Office
- > Michael Thompson Autria International Institute for Applied Systems Analysis (IIASA)
- ➤ Guy Trébuil France -UPR GREEN, département Environnements & Sociétés, CIRAD
- > Ernst Ulrich Von Weizsäcker Germany International Panel for Sustainable Resource Management
- ➤ John C. Warner USA University of Massachusetts, Center for Green Chemistry
- ➤ Stephen Zebiak USA Lamont Doherty Earth Observatory



With the backing of its Editorial Board, S.A.P.I.EN.S further strengthened its scientific reputation **in 2010** through **three main instruments.**

- **>** Editorial partnerships
- In particular with the recognised Indian research institute TERI, headed by Rajendra K. Pachauri, Chairman of the IPCC: as a result, the journal has extended its circulation to our partner's 3,000-strong reader network. In addition, copies of S.A.P.I.EN.S were systematically distributed at the fifty or so events organised by TERI over the course of the year.

• Other more *ad hoc* partnerships with international scientific bodies on the publication of conference proceedings, as in the case of the College for Environmental Design at the University of California, Berkeley, for its event entitled "Towards a Just Metropolis" or the Wuppertal Institute (see "Highlights of 2010") and with the scientific press specialising in sustainable development, such as Environment (USA) or TerraGreen (India).

In conjunction with campaigns to promote S.A.P.I.EN.S at international scientific conferences and meetings of dedicated working groups (see "Highlights of 2010"), these editorial partnerships have offered excellent opportunities for reaching out to the world's scientific communities most closely engaged with sustainable development and for bringing together an active local network centred on the activities of the Institut Veolia Environnement

Paper publication of a special issue devoted to "Cities and Climate Change". A theme of undeniable importance given the World Bank's estimate that the urban built environment will have doubled in size in thirty years from now and that cities already account for some 80% of global carbon emissions. This special issue addresses the theme from two aspects: cities as a major issue in reducing carbon emissions, and cities as motors for the adaptations needed to cope with climate disruption.

Special issue: Cities and climate change

Surveys

- > Measuring Urban Greenhouse Gas Emissions: The Challenge of Comparability
 Nikolas Bader (College of Europe) and Raimund Bleischwitz (College of Europe)
- Climate Change and Urban Planning in Southeast Asia
 Belinda Yuen (National University of Singapour) and Leon Kong (AKO Knowledge Solutions)
- Urban Transport Energy Consumption: Determinants and Strategies for its Reduction. An analysis of the literature Benoit Lefèvre (IDDRI)

Views

Cities are at the center of our environmental futureSaskia Sassen (Columbia University)

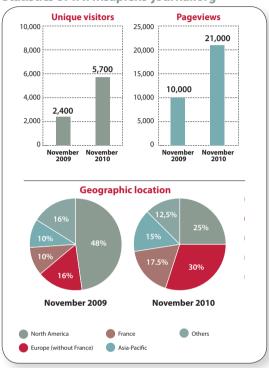
Initiatives

➤ China's Urban Energy Challenge Stephen A. Hammer (Joint US-China Collaboration on Clean Energy (JUCCCE))

- Over and above the novel design and circulation of these two journals, the quality of the articles published is the key factor that will determine their long-term success. Several of the articles published in 2010 attracted considerable interest. Some of the articles most frequently read, commented upon and downloaded on the S.A.P.I.EN.S website were:
 - "Residential exposure to traffic emissions and adverse pregnancy outcomes", by Gavin Pereira², Natasha Nassar, Carol Bower, Philip Weinstein and Angus Cook. The article sets out the present state of knowledge of the link between exposure to pollutants caused by motor vehicle transportation and prenatal risks.
 - "Is recycling "part of the solution"? The role of recycling in an expanding society and a world of finite resources", by François Grosse¹. The article prompted many responses from online readers, and resulted in its author being called upon to address the European Commission on several occasions.
 - "Europe's experience with carbon-energy taxation", by Mikael Skou Andersen³, one of the speakers at the conference organised by the Institut Veolia Environnement in Beijing in 2009.
 - •"Trade Policy and the Global Environment", by Harry Clarke⁴, also one of the speakers at the conference organised by the Institut Veolia Environnement in Beijing in 2009.
 - "Redesigning Urban Infrastructures for a Low-Emission Future", by Stefan Lechtenböhmer⁵, Claus Barthel, Frank Merten, Clemens Schneider, Dietmar Schüwer and Dieter Seifried. The article reviews the state of the art of existing technologies for reducing the carbon footprints of cities, followed by a feasibility study applied to the city of Munich.

Together, these initiatives more than doubled traffic on the website in the space of a year, taking S.A.P.I.EN.S onto a new level. Visitors to the website are still in the main American, European and French, but the number of readers from the Asia-Pacific region is growing steadily.

Statistics of www.sapiens-journal.org



To consult and download all S.A.P.I.EN.S articles and special issues: www.sapiens-journal.org

Strategic directions in 2011

Capitalise on the reputation of S.A.P.I.EN.S

- > Establish an editorial partnership with IsoCaRP (International Society of City and Regional Planners, a global association of professional planners from some 80 countries) on a special issue devoted to "sustainable urban planning".
- > Expanding circulation partnerships such as the partnership with Ecos, the magazine published by Australia's national science agency CSIRO, to continue outreach to international target scientific communities.
- > Consolidate the Institute's presence in China by setting up a circulation partnership along the lines of the partnership with TFRI in India

^{1.} Special adviser to the CEO, Veolia Environmental Services

^{2.} University of Western Australia, Australia

^{3.} University of Aarhus, Denmark

^{4.} La Trobe University, Melbourne, Australia

^{5.} Wuppertal Institute for Climate, Environment and Energy, Germany

FACTS Reports

The FACTS Reports journal, a pillar of the FACTS (Field Actions Science) initiative, is intended as an international forum for development field-practitioners, both governmental and non-governmental. Inspired by Philippe Kourilsky, the Institut Veolia Environnement is keen to play its part in structuring a working community for these actors in development who have come to play an invaluable role in international decision-making processes. In helping to highlight the most effective and easily repeatable practices, the Institute also disseminates unique insights gained from experience at the "base" of the world's population, where the societal and social trends of the future first take shape.

Two years of experience have confirmed the pertinence of this particularly innovative platform. The FACTS Reports journal offered **convincing proof of concept in 2010** and is now firmly established with those working in the field as an **effective model founded on three guiding principles.**

> Rigour: the publication process based, like that of S.A.P.I.EN.S, on the principle of peer review, is under the supervision of two themed Editorial Boards (Health and Economics) made up of respected figures from the aca-

demic world and NGOs. The element of peer recognition involved is also designed to appeal to potential authors, the actual agents of development, those who are the driving force behind the actions described in the articles and who, as such, are best qualified to explain in detail the new ideas they have introduced in the field.



Honorary Board

Hélène Ahrweiler

President, University of Europe Former Rector, Paris Academy

> Michèle Barzach

Former French Minister of Health President, GlaxoSmithKline Foundation

> Jean-Claude Berthelemy

Dean of the School of Economics, University Paris I, Panthéon-Sorbonne Member of the French Academy of Moral and Political Sciences

> Philippe Douste-Blazy

UN Under-Secretary General Special Adviser to the Secretary General in charge of Innovative Financing for Development Chairman, Unitaid

> François Gros

Honorary Permanent Secretary, French Academy of Sciences

> Mohamed Hassan

Executive Director, Third World Academy of Sciences

Pierre Marc Johnson

Former Prime Minister of Quebec Chief Negotiator in Canada-European trade talks

> Bernard Kouchner

Founder of Médecins Sans Frontières (Doctors without Borders)

> Philippe Kourilsky

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

> Federico Mayor

Former Director-General, UNESCO President, Fundación Cultura de Paz

> François Nordmann

Former Ambassador of Switzerland to France

> Rajendra K. Pachauri

Chairman, Intergovernmental Panel on Climate Change Director-General, TERI

> Peter Piot

Director, London School of Hygiene & Tropical Medicine Former Executive Director of UNAIDS and UN Under-Secretary General

> Mamphela Ramphele

Former Managing-Director, World Bank Former Vice-Chancellor, Cape Town University

> Ellis Rubinstein

President, New York Academy of Sciences President, Scientists without Borders

Amartya Sen

Economics Nobel laureate Professor, Harvard University

> Ismail Serageldin

Director, Library of Alexandria Former Vice President Special Programmes, World Bank

> Elie Wiesel

Writer Peace Nobel laureate

- Neutrality: in an indication of the esteem in which FACTS Reports is held, its Honorary Board recently gained two new members, both figures of international standing in their respective areas of expertise: Philippe Douste-Blazy, Chair of the Board of UNITAID and UN Under-Secretary-General in charge of Innovative Financing for Development, and Peter Piot, former Executive Director of UNAIDS and Director of the London School of Hygiene and Tropical Medicine.
- > Access: the principle of Open Access, which is also followed by S.A.P.I.EN.S, is a powerful motor for the dissemination of the FACTS Reports journal, extending its reach and significantly raising its profile in a community characterised by profusion and dispersal.

FACTS Reports published in 2010

- Special issue on "Migration and Health".
- Special issue on "Urban Agriculture".
- 29 articles published on the dedicated website.
- > Two printed compilations.

To consult FACTS Reports: www.FACTSreports.org

Much of the legitimacy that has accrued to FACTS Reports stems from the strengthening of the journal's editorial structure over the course of **2010**. This **thorough overhaul of the journal's overall architecture was marked by three key initiatives** to enhance the publication's reputation and attract new authors.

- > The introduction of a highly operational authorial process based, in common with all Institut Veolia Environnement activities, on the principle of joint production. Some articles may now be co-authored by pairings between, say, an academic who brings experience in the writing of scientific articles and a field practitioner contributing first-hand knowledge and experience of the project. A test partnership has already been agreed with the Chair of Social Business, Enterprise and Poverty of HEC business school.
- ➤ Opening up the "Editorial" column to all members of the Editorial Boards and launching a new "Commentaries" column, a forum open to noted figures in their field. Most recently, AIDS specialist Dominique Kerouedan shared her views on "The Global Fund to fight AIDS, Tuberculosis and Malaria: Five-Year Evaluation Policy Challenges".
- ➤ The launch of **special issues** with a specific thematic or regional focus, overseen by dedicated editorial pilot teams, published initially online and subsequently in print. Work on a special issue devoted to Brazil began at the end of 2010.

Strategic directions in 2011

Strengthen the circulation and editorial reputation of FACTS Reports

- > Set up a steering committee of representatives of those operating in the field to provide feedback on the FACTS Reports action plan.
- > Launch new themes and corresponding Editorial Boards, such as "Agriculture and Food", "Education" or "Poverty in rich countries".
- **> Publish special issues** on particular themes, regions.
- > Expand the network of editorial partners to increase circulation and position the journal as a partner in major events bringing together field operators.

Multidisciplinary discussion platforms: the international conferences

The Institut Veolia Environnement organises highly regarded international conferences designed to promote debate on future trends and encourage dialogue between different disciplines and stakeholders engaging with the issues of sustainable development.

These international conferences are part of the genetic make-up of the Institut Veolia Environnement, an exemplary embodiment of its vocation as a melting pot of ideas. Offering a forum for leading academic and institutional experts and representatives of international organisations to discuss the main emerging questions, these events are the ideal vehicle for disseminating cutting-edge multidisciplinary knowledge beyond the confines of academic circles.

Since 2001, the Institut Veolia Environnement has organised five international conferences along what are now tried and tested lines. The conference themes are determined after lengthy preparation involving discussions with the Foresight Committee at its half-yearly meetings, and in consideration of the conference venue chosen. The Foresight Committee also plays a part in identifying the institutional and academic partners essential in helping to construct the conference and cement its legitimacy.

In the wake of the conference organised in China in October 2009 on the theme of "Trade, Urbanization and the Environment", the Institut Veolia Environnement followed through in 2010 with a series of post-conference workshops organised in conjunction with its main partner in China, the Center for Human and Economic Development Studies (School of Economics, Peking University). The aims of the initiative are twofold: to expand the Institut Veolia Environnement's network in a country in the throes of major environmental changes, and to capitalise on the connections

made through the 2009 conference to forge links between Chinese and international experts grappling with key issues.

Over the course of 2010, three workshops were organised with the support and contribution of "the core group" composed of 12 Chinese recognised experts (see next page).

- March: Workshop 1 "Carbon Tax". A comparative report on projects in China and Europe, including debates on the impact of pricing measures on international trade. Speakers of note included Ming Su, Director of the Research Institute for Fiscal Science at China's Ministry of Finance, Guillaume Sainteny, associate professor at the École Polytechnique, and Béatrice Deshayes, Tax Director, Veolia Environnement.
- ➤ July: Workshop 2 "Poverty and the Environment", in preparation for the 2011 international conference on the same theme. Keynote speakers included Zhong Wu, Director General of the International Poverty Reduction Center in China, and Martin Hirsch, Former High Commissioner for Active Solidarities Against Poverty and President of the Civil Service Agency.
- ➤ October: Workshop 3 "Sustainable Cities". A comparative review of the situation internationally and in China, discussion of urban development and environmental issues. Speakers included Zhong Ma of the Renmin University of China, Bharat Dahiya of UN-HAB-ITAT and Dimitri de Boer of the UNIDO China Office.



Beijing post conference workshops: members of the core group of Chinese experts

- Xia Guang, Director, Policy Research Center for Environment and Economy, Ministry of Environmental Protection
- Zhang Yansheng, Director, Institute for International Economic Research, National Development and Reform Commission
- Wu Jiahuang, Vice Chairman, China Society for World Trade Organization Studies, Ministry of Commerce
- Zhang Shiqiu, Deputy Dean, College of environmental science and engineering, Peking University

- Pan Jiahua, Director,
 Urban Development and
 Environment Research Center,
 Chinese Academy of Social
 Sciences
- ➤ **Gu Chaolin,** Professor, Department of Urban Planning, School of Architecture, Tsinghua University
- Zhou Hongchun, Division Chief Research Professor, Development Research Center of the State Council
- Wang Wuyi, Researcher, Doctorial Tutor, Institute of geographic sciences and natural resources research, CAS

- Ma Zhong, Dean, School of Environment and natural resources, Renmin University of China
- > Liu Minquan, Professor and Director, Department of Development Economics, School of Economics, Peking University; Director of Center for Human and Economic Development Studies, Peking University
- > Su Ming, Director, Research Institute for Fiscal Science, Ministry of Finance
- > Wu Zhong, Director General, International Poverty Reduction Center in China



Alongside this series of one-day workshops, much of 2010 was taken up with preparations for the 6th international conference, scheduled for June 2011 in Paris, in partnership with the Agence Française de Développement, on the theme of "Reconciling poverty eradication and quality of the environment: what are the innovative solutions?" - a subject of the greatest concern in the light of a world population expected to reach a total of 9 billion by 2050 and the pressing need for rational use of limited natural resources. This analysis of the interactions between

the struggle to eradicate poverty and preservation of the quality of the environment will also form part of a crucial international agenda, that of **the upcoming Earth Summit, Rio +20, to be held in 2012.**

The two partners jointly organising the conference have elected to analyse the relationships between poverty eradication and environmental protection from **four angles:** climate change, biodiversity, poverty and quality of environment in urban and peri-urban areas, and the role of the private sector.

General outline of the programme for the Paris conference – 27th & 28th June 2011

Theme 1 – poverty eradication and climate change

- > Anticipating and adapting to climate change
- > Rural poverty, soil degradation and climate change
- > Poverty and clean energy

Theme 2 – poverty eradication and biodiversity

- > Sustainable management of natural resources and benefits for communities
- > Enhancing the value of ecosystem services
- > Preservation of ecosystems and the fight against poverty: territorial challenges

Theme 3 – poverty eradication and quality of the environment in urban and peri urban areas

- > Rehabilitation of poor neighbourhoods and the living environment
- Town and country planning: reconciling environmental quality and the fight against poverty in peri-urban areas
- > Sanitation and other essential services: how to break the economic and technical deadlock in poor districts?

Theme 4 – poverty eradication and quality of the environment, what is the role of the private sector?

- Creativity and integration of the informal sector
- > Is there a place for environmental protection in improving access to basic goods and services for the poor?
- > Feasibility and implementation of innovative funding



The Agence Française de Développement

AFD is a public development finance institution working to fight poverty, support economic growth, and promote and protect global public goods in developing and emerging countries and the French Overseas Communities.

- > Operating in the five continents
- > More than 1,700 officers
- > Committed over € 6.7 billion in 2009

The conference will be held under the patronage of France's Minister for the Economy, Finance and Industry, which will firmly establish its legitimacy in political decision-making circles. In addition, most of the themes will be addressed with the cooperation of a respected international partner, a factor essential in attracting the leading academic experts as well as the most innovative players in the field, and invaluable in enhancing the event's profile and potential spin-off. The partners associated with the conference are: the International Union for Conservation of Nature (IUCN), the World Business Council for Sustainable Development (WBCSD) and the International Poverty Reduction Center in China (IPRCC).

Further cooperation is under way on preparing framework documents for the four conference themes, with:

> the Initiative for Development and Global Governance (IDGM), a joint initiative on the part of

Institut du Développement Durable et des Relations Internationales (IDDRI) and Fondation pour les Etudes et Recherches sur le Développement International (FERDI);

Chair of Social Business, Enterprise and Poverty, of HEC Business school.

Among those who have already **confirmed** they will be taking part are the following:

- Opening speakers: Christine Lagarde, French Minister for the Economy, Finance and Industry; Antoine Frérot, Chairman and CEO of Veolia Environnement; Dov Zerah, CEO of AFD; Wangari Maathai, Nobel Peace Prize Laureate and founder of the Green Belt movement; Amartya Sen, holder of the Nobel Prize in Economic Sciences and member of the Institut Veolia Environnement Foresight Committee;
- Closing speakers: Trevor Manuel, Minister in the Presidency, National Planning Commission, Republic of South Africa; Brice Lalonde, Executive Coordinator for the Rio 2012 conference, United Nations.



Strategic directions in 2011

Contribute to ongoing dialogue between those involved in sustainable development

- ➤ Disseminate best practices identified at the Paris conference and put forward recommendations for the preparation of the Rio +20 Earth Summit scheduled for 2012.
- Prepare the 7th international conference of the Institut Veolia Environnement, to be held in Washington, on the theme of "biodiversity and sustainability".

Research partnerships: foresight studies

In order to conduct in-depth explorations of issues in all their complexity, tease out the most likely future scenarios and forge a network of readily accessible skills, the Institut Veolia Environnement has chosen to work through research partnerships.

This process of advanced research work over a period of one to three years, directed towards gaining a deeper insight into issues identified as priorities, offers avenues for reflection on the great changes affecting the interface between society and the environment. The Institute numbers among its partners of long standing such renowned centres of excellence as the Massachusetts Institute of Technology (MIT), Sciences Po, Institut du Développement Durable et des Relations Internationales (IDDRI) or The Energy and Resources Institute (TERI) in India.

It was in association with IDDRI and TERI that the research project entitled "The future of carbon financing schemes for sustainable transport: Mumbai paves the way" was launched in 2010. Another partner in the project is Veolia Transdev, whose contribution as both pilot organisation and direct beneficiary is particularly valuable. The UK's Transport Research Laboratory (TRL) is also associated with the research programme, which is aimed at designing carbon emissions inventory methodologies geared to the issues of

public transport in developing or emerging countries and that will help to unlock access to carbon financing instruments.

This ambitious project has attracted considerable attention. In **September**, its official launch was marked with an eponymous seminar held in Mumbai (India). Some thirty speakers took part in the seminar: representatives from local authorities (MMRDA, the Mumbai Metropolitan Region Development Authority), the Mumbai bus operator (B.E.S.T network), Veolia Transdev France and India, Indian financial institutions (IDFCL, Infrastructure Development Finance Company Limited), the Economic Mission in Delhi and the Consulate General in Mumbai, the Agence Française de Développement (AFD), Germany's international cooperation agency (GTZ) and researchers. The outcome of the seminar was an agreed programme of work covering 2011 and culminating in a final report to the UN Climate Change Conference to be held in Durban (South Africa) at the end of the year.

Essentials of the "Mumbai" research programme

Theme: The future of carbon financing mechanisms for sustainable transport.

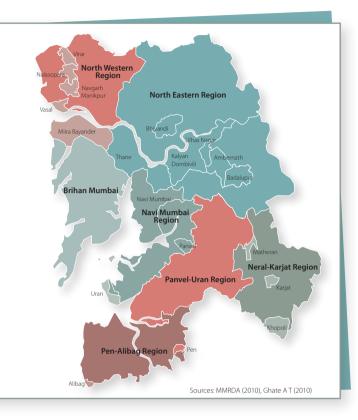
- **Key partners:** The Energy and Resources Institute (TERI India), Institut du Développement Durable et des Relations Internationales (IDDRI -France), Veolia Transdev.
- > Study dates: 2010-2012.
- > Initial objective: design a realistic methodology to facilitate access by developing cities to carbon financing mechanisms for the public transport sector.
- > Find out more: www.veolia-transport.com/fr/medias/agenda/conference-climat-cancun.htm



Mumbai Metropolitan Region

- Mumbai: largest urban agglomeration in India
- Population of Mumbai Metropolitan Region (MMR): more than 20 million
- Area: 4,355 sq.kms; 20 Urban Local Bodies (7 Municipal Corporations and 13 Municipal Councils)





In December 2010, the project partners were selected by the organisers of the United Nations Climate Change Conference in Cancun (Mexico) to present a progress report on their initiative. This invitation represented an extraordinary opportunity to further raise the profile of the project with international bodies responsible for negotiations on climate change. Two well-known panellists added their voice to the debates: Ronan Dantec, Vice President of the Nantes metropolitan authority with responsibility for sustainable development and spokesman for local authority group United Cities and Local Governments (UCLG), and Jan Corfee-Morlot, climate policy analyst with the OECD. The former highlighted the need to look beyond a methodology centred on transport alone, by defining a methodology applicable on a European scale. The latter stressed the need for incentives and for the harmonisation of policies and tools at a global level.

This side event helped to raise negotiators' awareness of the barriers the public transport sector currently faces in accessing carbon financing resources, and of the need to promote solutions to support the development of sustainable urban transport.

The Institute also continued in 2010 to promote the findings of research programmes completed in 2009 on the theme of "cities and climate change".

The first of the programmes concerned was the study on estimating the carbon footprint of urban household energy use in India and China, the results of which were presented in a side event to the Delhi Sustainable Development Summit (DSDS) organised by TERI in New Delhi in February 2010.

The second was the study on harmonising urban carbon inventory methods across Europe, conducted in partnership with the College of Europe and the Wuppertal Institute. The review article published in S.A.P.I.EN.S on completion of the study provided material for reflection and was cited as a reference in the joint UNEP, UN-Habitat and World Bank report, "International Standard for Determining Greenhouse Gas Emissions for Cities".

Another publication worthy of note was the first report by the World Bank and United Cities and Local Governments (UCLG) ("Cities and Climate Change: an urgent agenda"), which presents the Institut Veolia Environnement and refers to these two research programmes and the S.A.P.I.EN.S articles on the subject, in a list of 30 centres working on the theme internationally.

As ever, the Institut Veolia Environnement also relies on the bibliographic monitoring and analysis carried out by interns to further its exploration of new issues. **Three interns worked at the Institute in 2010:**

➤ Clara Brenot, reading for a Bachelor degree in European Studies at King's College London, continued the work begun in 2009 on the "Bottom of the Pyramid" socio-economic model, which adopts a new approach to an understanding of the poorest sections of the population by considering them as fully-fledged economic agents in their own right. Having reviewed the principles of the model and its potential sectors of application, Clara Brenot is now drawing up a detailed analysis of the criticisms that have been levelled against this innovative approach before proceeding to examine ways in which the model could be updated.

Population concerned by the "bottom of the pyramid" model, by continent

Continent	Population	Aggregate income	Share of the region's population	Share of the region's purchas- ing power
Asia (including the Middle East)	2.86 billion	\$3.47 tril- lion	83%	42%
Eastern Europe	254 million	\$458 billion	64%	36%
Latin America	360 million	\$509 billion	70%	28%
Africa	486 million	\$429 billion	95%	71%

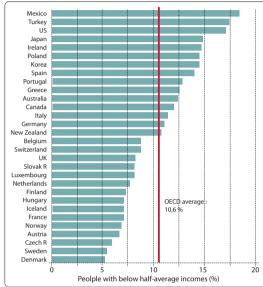
Memoire of Clara Brenot

Source: WRI, The Next 4 Billio

> Hui Zhang, studying for a Master's degree in International Economic Policy at Sciences Po Paris, worked on the subject of "poverty in developed countries", providing an overview of the present state of knowledge of a subject still as yet in its infancy but destined to take on growing importance. Her bibliographic research falls into three parts: the theoretical foundations, centred on

methods of analyzing poverty (on a purely monetary or a multidimensional scale); statistics by region (Europe, the United States, Japan and the United Kingdom) and by social group; the impacts on access to essential services and the public and private sector solutions on offer.

Proportion of the population living below the poverty line (%)



Synthesis of Hui Zhang

Source : Growing Unequal ? OCDE, 2008

> Anthony Mensier, reading for a Master's degree in Economic Intelligence at Sciences Po Bordeaux, began a bibliographical study of the availability of rare earth metals and other strategic materials. The aim of the study is to catalogue these elements, their uses and the constraints, whether geopolitical, technical, economic or geological, limiting their production. A detailed analysis of price fluctuations, procurement pressures and the potential for recycling will seek to identify and characterise the most strategic metals for the next industrial era.

Strategic directions in 2011

Enhance the dissemination of the foresight studies

> Expand the use made of foresight research. Final report of the Mumbai study to the UN Climate Change Conference (COP 17) to be held in Durban (South Africa), in December. Objective: define an integrated national transport plan for India, eligible for a new instrument under discussion as part of international climate change negotiations.



Highlights of 2011

February

> FACTS takes part in the seminar organised by the Fondation de France and Comité Français pour la Solidarité Internationale (CFSI) in Dakar, Senegal, on the occasion of the 10th World Social Forum.

March

Discussions continue with IsoCaRP (International Society of City and Regional Planners) on setting up an editorial partnership with S.A.P.I.EN.S (see page 13).

May

- Meeting of the Board of Directors of the Institut Veolia Environnement.
- > FACTS takes part in the 4th Forum Convergences 2015 in Paris.

June

- Preparation of a special edition of FACTS Reports to mark the 30th anniversary of Ashoka, the global association of the world's leading network of social entrepreneurs.
- > Half-yearly meeting of the Foresight Committee in Paris.
- > 6th International Conference in Paris on the theme of "Poverty and the Environment", in partnership with the Agence Française de Développement (AFD). Selected lectures reprinted in the FACTS Reports journal.

September

➤ A milestone – the Institut Veolia Environnement marks its 10th anniversary.

October

> Half-yearly meeting of the Foresight Committee in Mexico

November

A special edition of FACTS Reports will be prepared on the occasion of the Fondation Mérieux colloquium on women's and children's health.

December

> Final report of the Mumbai study to the UN Climate Change Conference (COP 17) to be held in Durban (South Africa).



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Interns in 2010:



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So as to ensure that knowledge is widely disseminated and exchanged, the Institut Veolia Environnement makes its entire collection of studies and publications freely available to everyone.
Study reports, conference summaries and articles can be accessed on
> www.institut.veolia.org/en
> www.sapiens-journal.org
> www.factsreports.org

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