Under the aegis
of François HOLLANDE,
President of the French Republic

IDDRI

SciencesPo.

**INTERNATIONAL CONFERENCE**

HOTEL DE LASSAY, 128, RUE L'UNIVERSITÉ, 75007 PARIS
JULY 12 & 13, 2013

# AN INNOVATIVE SOCIETY FOR THE TWENTY-FIRST CENTURY

WWW.IDDRI.ORG

INVESTISSEMENTS D'AVENIR

Under the aegis
of François HOLLANDE,
President of the French Republic

IDDRI
SciencesPo.

Media Partner
Les Echos

INTERNATIONAL CONFERENCE

# AN INNOVATIVE SOCIETY FOR THE TWENTY-FIRST CENTURY

The first industrial revolution opened up an extended period of intense economic innovation. New technologies, new energy sources and new forms of work organization were invented and rapidly diffused, thus leading to the growth of material prosperity and wealth as measured by Gross Domestic Product (GDP) per capita. Today, some economists are highlighting the fact these growth rates in industrialized countries have been in decline over the course of several decades, raising the issue of the exhaustion of this economic model and the related social and budgetary issues (e.g. Gordon, 2012).

Are we facing a failure of economic innovation that is leading to a virtual stagnation? This question remains unanswered. However, it is becoming increasingly clear that we are experiencing a lack of innovation in terms of environmental protection. For example, to meet its commitment to restricting global warming to 2°C, the international community should be decoupling growth and emissions of greenhouse gases at a rate that is ten times faster than that of recent decades.

In this context of a potential innovation failure, how can we build a society that will transform itself to ensure economic and environmental prosperity for all? How can we build an innovative society?

Two strategic responses can be distinguished: some believe that new technologies or new “green” services, by responding to environmental issues, can boost economic growth and therefore prosperity for all (Stern and Rydge, 2012); others believe that it is impossible to solve environmental problems while economic growth continues, and predict or call for zero growth, or even “degrowth” (Jackson, 2009). Does economic growth have a future, either despite or due to environmental protection? To those who believe it does not, are they able to envisage a means to create prosperity without growth, of building an economy that creates employment and ensures the sustainability of our social systems?

Building an innovative society is equivalent to supporting the dissemination of new methods of production, distribution and consumption. Beyond technological innovations, there are numerous pioneers—citizens, businesses, local authorities—who are inventing new, more environmentally friendly economic models, which promise either a return to growth or resilience in a context of degrowth. We may question the ability of these new models to meet their economic, social and environmental commitments. We must also consider how to promote their conception and dissemination: who are the innovators, how do these alternatives arise, what are the barriers to their dissemination? Should we remove these barriers sector by sector, or do they concern the economy and society as a whole?

Finally, the building of an innovative society cannot be considered without the integration of globalisation, a major determinant of the early twenty-first century. Should globalisation be better regulated to foster innovation? The ongoing trade war on solar energy and the chaos that characterizes this emergent industry provides an example of the challenges of globalisation inherent in the construction of an innovative society.

Faced with the possible depletion of their growth models and with the ecological imperative, industrialized societies must transform themselves to ensure the prosperity of their citizens. Innovation is needed to decouple growth from environmental degradation or to decouple growth from prosperity. They must—in a globalized context—create a fertile ground for innovation, the development of new technologies and new economic models. To discuss these issues and the new model that must be built in the perspective of a crisis exit, the Institute for Sustainable Development and International Relations (IDDRI) is organizing an international conference on 12 and 13 July 2013, with actors from the economic, political, academic and civil society spheres.

## 1 HAVE OUR MODELS OF GROWTH ENTERED INTO AN EXHAUSTION PHASE?

*Is the continued decline in the growth rates of many industrialized countries a sign that their growth model is exhausted? Does deindustrialization or the depletion of resources, for example, indicate that they are condemned to slow growth or even economic stagnation? The first plenary session will compare the analysis of the extent and causes of the "structural" economic crisis in these countries. It will also discuss the prospects for growth in industrialized countries and for convergence of emerging countries, particularly in a context marked by environmental stress. Can we expect a return to strong growth, despite or because of the necessary ecological transition? Can green technologies and green services launch a new wave of growth?*

Economic growth, as measured by the increase in GDP per capita, is a relatively new phenomenon. While keeping in mind the difficulties related to the measurement of this indicator over the very long term, we know from the work of Angus Maddison (2001) that production per capita has either stagnated or increased only very gradually over the course of millennia. Between 1000 and 1820, it grew on average by just 0.05% per year, with even "leader" countries—Western Europe and European colonies—only reaching 0.14%. These countries have experienced a clean break from the first industrial revolution through the emergence of new technologies, new energy sources, new forms of work organization, new patterns of consumption... The growth rate of GDP per capita was higher than 1.2% until the early twentieth century, and underwent a

further acceleration after the Second World War. The growth rate in the United States between 1950 and 1973 was 2.4%, while it was two or three times higher than this in Western Europe and Japan during the economic catch-up. This was the golden age.

Since then, growth has slowed. According to Robert J. Gordon (2012), the rapid progress experienced during the industrial revolution may well have been a "unique episode in human history", rather than a sign of robust and limitless growth. He pointed to the slowing of growth of GDP per capita that has occurred in the United States since the 1970s, and he expects this trend to continue. While Gordon did not extend his analysis to other industrialized countries, it is tempting to consider future growth in France, Germany or Japan in the same light, since all these countries are also experiencing a sharp decline in productivity gains, particularly because they experienced very high rates in the 1960s. In France, the expression "*Trente Glorieuses*" (Glorious Thirty) has given way to that of "*Trente Piteuses*" (Pitiful Thirty), while in Japan, a country in virtual stagnation, the phrase "lost decades" is in common usage.

Numerous "suspects" have been proposed for these declining growth rates, ranging from the "Fordist compromise" to the switch to service economies, through the lack of technological innovations or the depletion of natural resources and the impact of environmental constraints. There is much controversy about which of these suspects are guilty, i.e. whether they have a decisive role in the possible slowdown of growth in industrialized countries, and whether it is possible to "arrest" the culpable suspects and to revive growth.

Can services boost long-term growth? While they represent nearly three quarters of GDP in industrialized countries, they account for less than one third of productivity gains in the economy. However, many authors credit the introduction of new information and communication technologies (ICTs) as capable of revolutionizing services to individuals and public services, making them both more efficient and more environmentally friendly (Debonneuil, 2010). Are we lacking in technological innovation? This question, raised by Robert J. Gordon, may seem surprising in the digital revolution era. But it is less startling when one delves deeper into the controversies surrounding the contribution of ICT to growth. In 1987, Robert M. Solow expressed surprise that although evidence of the computer age was visible everywhere... its impact on productivity statistics was imperceptible. Twenty-five years and a dot-com bubble later, the Solow paradox has not yet been fully resolved.

Another major controversy surrounds the issue of whether the environment and the measures implemented for its protection constitute an opportunity or a risk to the future of economic growth. There are numerous interactions between the economy and the environment and the debate is complex. However, let us consider here two divergent interpretations. The work of Nicholas Stern (Stern, 2007) shows the economic risk associated with inaction on climate change. More recently, he has developed the idea of a low-carbon industrial revolution in an echo of previous industrial revolutions (Stern, 2012). Green technologies, led by renewable energy, have the ability to launch, or at least contribute to the launch of a new technological revolution, which—in a Schumpeterian sense—would initiate a new wave of growth. Are wind and solar power equal to steam engines, railways or electricity? Can they enable, as did their illustrious predecessors, a radical overhaul of the economy?

In contrast, Tim Jackson (Jackson, 2009) highlights the need to face the "harsh reality" of the numbers. For the international community to adhere to its commitment to keep global warming to below 2° Celsius, it must "decouple" economic growth and greenhouse gas emissions at a rate that is ten times faster than in recent decades. According to Jackson, this represents an impossible challenge. It is therefore necessary, in addition to decoupling efforts, to reduce growth or even bring about degrowth in industrialized countries. This analysis can be compared with that of the Club of Rome on the limits to growth in a world of finite natural resources.

Do all these elements represent the exhaustion of the growth model for industrialized countries? Are we facing a failure of economic innovation and can it be overcome? Is it possible to be optimistic and think that the *Trente Glorieuses* are actually ahead of us, either due to or despite the environmental challenges that must be solved? Such questions are now being raised. In a context of uncertainty about the future of economic growth, it seems important to debate the links between growth and prosperity.

## 2 CAN WE BUILD A POST-GROWTH SOCIETY?

*In political discourse, economic growth and prosperity seem synonymous: we need more growth to create jobs, to invest in social and environmental protection, to reduce inequalities and ultimately to be happy. Given the depth of the economic crisis, support for economic activity is essential in the short term. However, in the medium and long term are we doomed to further growth to ensure prosperity for all? Can we make our societies resilient to the uncertainty of future long-term growth? And what if the greatest economic innovation was not to relaunch growth, but to build an economy that emancipates itself from the need for growth?*

Can an economy prosper without growth? Even advocates of degrowth acknowledge the difficulty in answering this question (Jackson, 2009), because we cannot merely state that "money doesn't buy happiness".

In 1974, the economist Easterlin put forward a paradox: there is no link between GDP increase and the increase in the reported level of happiness and the subjective well-being of citizens, at least beyond a certain absolute level of income. It is relative income that seems to be much more critical: what matters is not to be richer in absolute terms, but to be richer than one's neighbour. Or, at least, not to be (much) poorer than one's neighbour. A decoupling of economic growth and happiness is at the heart of the argument for those who call for the construction of a society that turns its back on GDP. However, this viewpoint has been challenged (Stevenson and Wolfers, 2008). Through the use of a database that was much more comprehensive than that which Easterlin had at his disposal at that time, Stevenson and Wolfers arrived at the opposite conclusion: "The difficulty of identifying a robust GDP-happiness link from scarce data led some to confound the absence of evidence of such a link with evidence of its absence".

Does GDP create happiness? There remains much debate regarding the perceived level of happiness and that which is reported by citizens. What about the link between economic growth and employment, inequalities, the sustainability of welfare states or the financing of education, health and ecological transition? What about the link between growth and these constitutive elements of individual and collective prosperity?

For Jean Pisani-Ferry (Darvas *et al.*, 2013), European social models are unsustainable in prolonged episodes of slow growth. Such conditions jeopardize public and private deleveraging, weaken the banking system, reduce the attractiveness for investors, etc. Thomas Piketty (Piketty, 2011) also warns about the risk of rising inequality if strong growth fails to "reshuffle the cards" between inheritors and the rest. More generally, in public debate and for a vast majority of politicians, growth remains synonymous with employment and the provision of manoeuvre room for redistribution, reform and investment in education, health and environmental protection.

Is it impossible to ensure prosperity without growth? Some proponents of degrowth acknowledge the difficulties of such an exercise and have proposed ways to decouple growth from economic prosperity (Victor, 2008; Dietz and O'Neill, 2013). In terms of employment, the reduction of working time is central to their strategy. In an economy that is growing in productivity, which requires less and less human labour for the production of a good or service, we must produce and consume in ever increasing amounts to maintain employment. If this is not possible, then the alternative solution is to reduce working time, thus transforming productivity gains into leisure rather than into purchasing power. However, while this analysis is relevant in a world that is growing in productivity and yet must stop growing, does it remain relevant in a world situation—which is perhaps more likely—where it is precisely the loss of productivity gains that leads to zero growth?

Another major challenge concerns the role of the state and the mutualization of certain types of expenditure—health, education, environmental protection, etc.—in a world where productivity is stagnant. Three strategies to address this issue can be identified. The first involves the delegation of public service tasks to companies or associations, in the mould of David Cameron's "Big Society". However, in addition to the issues of accessibility and solidarity that are raised by this strategy, how does making the consumer rather than the taxpayer pay for a service provide a satisfactory answer to the stagnation of productivity and therefore of purchasing power? Unless one relies on voluntary work or considers that the state is dramatically inefficient, isn't the "smaller state" solution to the problem of low growth merely a fallacy? The second strategy is to increase the tax burden to cover public expenditure that may grow faster than the economy on average, as has been the case for health for many years. Would this be possible to implement within a single country, given that we live in a world without borders where the tax basis, particularly capital, is mobile? Would this be acceptable to citizens whose incomes had stagnated? The third strategy is that of state reform. This is essential to ensure the most efficient use of taxes and thus make their potential increase acceptable to citizens. But can this constitute a strategy as such? In other words: can we meet needs that we assume will continue to grow, without spending more, would doing so necessitate a radical transformation in the way these needs are met? This would, for example, involve giving consideration to whether the adoption of a preventive health policy could be more effective at achieving the same level of health for the population as one aimed solely at curative care.



We cannot conclude this introductory discussion on the theme of prosperity in the absence of growth without mentioning indicators that are alternative or complementary to GDP. GDP was not designed as a measure of happiness: it measures the production of monetized goods and services, ranging from

weapons to education, while it excludes any voluntary activity, disregards the distribution of consumption, etc. For several decades, multiple indicators have been developed. These include the well-known human development index of the United Nations and WWF's ecological footprint. There also exists a wealth of social and/or environmental indicators that provide an alternative, or are complementary, to GDP. However, after a revival of political interest following Nicolas Sarkozy's 2008 decision to launch a commission on the measurement of economic performance and social progress, new indicators seem to have disappeared from the French and European political agendas. Is this disappearance due to the fact that they raise uncomfortable questions, or because their usefulness is debatable? Is it really easier to value something that can be measured? Do we need a unique aggregated alternative indicator, or a series of indicators? And according to which democratic process should such indicators be developed?

## 3 THE CONSTRUCTION OF INNOVATION

*The world is undergoing profound change that will result in the building of a society that is different from that in which we live today. In this session the focus will be on innovations that are not technological in nature but have been proposed by entrepreneurs or citizen networks: such as the sharing economy, short supply chains, transition towns, 'human' companies, citizen funding, etc. Guided by highly diverse motivations (including economic, solidarity or environmental initiatives) advocates of such innovations redefine the traditional boundaries of economic and social spheres, of the production and consumption of goods and services, and of the relationship between citizens and public and private institutions. They propose new frameworks in which technological innovations can be deployed and reconfigured. In sectors as diverse as energy, food, transport and culture, we have already witnessed a shake up of conventional strategies by new organizations and new business models. Are the economic, social and environmental claims of these innovations credible? To what extent do they offer prospects for the renewal and redevelopment of economic activity? How can public action help to build a fertile ground for social innovation that would support and not stifle such advancement?*

The history of industrial revolutions gives precedence to technical explanations and technological discoveries, and thus tends to emphasize the role of steam engines or electricity, while ignoring or underestimating other developments that have marked industrialization, such as: the emergence of new forms of work organization (e.g. Taylorism), the "consumer revolution", the specialization of workers and territories and the increasing volume of trade. The primacy given to technology is also reflected in the debate on environmental protection. Thus, the greening of the automotive industry is primarily discussed in terms of alternative powertrains—electric, hydrogen, etc.—while at the same time the car's place in our lifestyles is changing because of its negative impacts, the existence of alternative transport and the development of new ways of accessing cars, such as car sharing that aims to reduce the ecological footprint of our mobility.

In this "technocentric" context, it seems important to highlight innovations of a different nature that we refer to as "social innovations". These innovations correspond to new practices to satisfy needs that are neglected by the market or by institutions, or they even foreshadow the emergence of new needs, new aspirations of social actors whose values go beyond the scope of that which

the market integrates and is able to anticipate. These innovations are largely, but not solely, based on social economy structures; they sometimes revisit traditional know-how or models, but also rely heavily on new technologies; they are part of highly diverse processes with contrasting objectives: creating social links, improving urban living, supporting personal initiatives, revitalizing territories, fighting against exclusion, advocating alternative economic models, rebuilding democracy, protecting the environment, etc.

Thus, the "digital revolution" supports the rise of the sharing economy, favouring the transition from a property economy to an access economy. This trend, which can be compared to the explosion of the online second-hand market, is for some a solution to the context of economic crisis, but also a way to reconstruct social links through sharing networks, or a deliberate attempt to reduce the environmental impact of our activities. These practices clearly question the economics of capital goods: can such practices lead to a more intensive use of goods that have previously been underutilized and therefore to a lowering of production? Or, on the contrary, to a generalized access to cheaper services and a faster turnover of capital goods? Or an increased demand for higher quality goods of greater efficiency and durability?

This development is particularly significant in the area of mobility, where car-sharing and carpooling initiatives are multiplying. Beyond the local solutions that these developments bring, for example, to urban dwellers who are over equipped compared to their car usage requirements, to rural inhabitants for whom public transport is non-existent and they thus organize collective transport, or to workers who are able to control the growing cost of commuting, these initiatives have contributed to the major reconfiguration of the understanding of mobility and related issues. The traditional dichotomy between private vehicles versus public transport is diminishing in favour of a multitude of hybrid organizations that today involve industry professionals and local authorities. These new organizations are in turn a crucible for technological innovation that will find very different forms of expression to those hitherto explored.

Junk food, problems in the agricultural sector particularly for smallholders, concerns about globalisation and an increasing awareness of the negative externalities of the agro-industrial model all contribute equally to the emergence of new solidarities in territories between producers and consumers, through the AMAP (Associations for the Preservation of Peasant Farming) system, the development of fair trade and the growing consumer demand for fresh, local or organic products. These activist initiatives are not only based on the demand for a healthy diet: they represent a re-evaluation of the value chains between producers and consumers, of the role of agriculture in the vitality of regions and the link between individuals and nature. This is another example of producers, consumers and distributors using their initiative to form new organizations that, inspired by these innovations, offer more widely accessible models that challenge the dominant practices of agriculture and the agribusiness world.

The sharing, functionality, local solidarity and circular economies are all based on a change in consumer attitudes towards consumption, a displacement of problematics and a different approach to value and initiative. In doing so, they also create manoeuvre room for rethinking production and access to goods and services. "Social" innovation is essential in that it reveals the individuals that are taking action for society, while also constituting an invaluable guide to political action. For example, the Transition Towns movement specifically

supports the aspirations and needs of individuals and collectives in the implementation of a political vision of the urban fabric.

Furthermore, social innovation also enables the place of technological innovation in the transformation of societies to be thought of in a different and radical way.

Public support for technological innovation takes the form of grants to various public and private R&D projects, along with efforts to bring research closer to the market and grants for the diffusion of new technologies. But how should social innovation be supported? Beyond sectoral measures to support specific ruptures, which overall strategy should public authorities develop? In France, should 10% of the additional funding that is allocated to the "investment for the future" fund be reserved for heterodox innovations (Kaplan, 2013)? Will it be necessary to develop new financial tools or to multiply pilot territories or "sustainable" business and association incubators? How can we identify the emerging structures and how can we give them a role? Ultimately, what are the public policies that will enable the creation of a fertile ground for social innovation?

## 4 A NEW GLOBAL CONTEXT FOR INNOVATION

*Globalisation and the arrival of large emerging countries onto the international scene are an undeniable feature of the early twenty-first century; innovation must therefore be thought of in this context. Is this new global situation an opportunity for technological and social innovation? Are we witnessing an emergence of a new geography of innovation that clearly conflicts with the notion that "the North invents while the South copies" and is increasing our global capacity for innovation? Does economic exchange enable the costs of environmental technologies to be reduced? Or, is globalisation primarily synonymous with conflicts over intellectual property and of trade war, as is currently the case in the solar industry? This session will question the need for better regulation of globalisation and for the building of innovative societies.*

The beginning of the twenty first century is marked by an unprecedented increase in trade in goods, services, capital and ideas. This globalisation is an opportunity to invent and disseminate new more sustainable forms of production and consumption, but it also entails risks.

Globalisation carries hopes for a new geography of innovation that is more integrated and richer. The rise in power of the major emerging countries is not only accompanied by an increased investment in research, but also—and especially—by strong interactions between the "North" and "South". According to Navi Radjou (Radjou *et al.*, 2013), the time has passed when companies developed new products to meet the needs of consumers in the North, and then adapted them for the South. With the explosion of the markets in the South, new products have been developed to directly address the needs of Indian, Chinese and African consumers. The R&D, production and marketing behind these new goods and services for the South are carried out... in the South. And this situation is not merely temporary, since R&D in the North and the South are increasingly part of the same network, as is the case in large multinationals.

A new geography of innovation seems to emerge which, in terms of ecological transition, challenges the idea of a Northern provider of "sustainable" technology solutions for the world, and the South in particular. Instead, it is now the South that inspires the North, according to Navi Radjou, especially through the

implementation of the “Jugaad Innovation”, which is a management method based on the ability to improvise solutions under conditions of constrained resources. Examples of this are the mobile phone chargers that can be plugged into bicycles, which Nokia has developed based on practices in the South, or the small Tata Nano car which costs 2000 dollars and is today sold outside of Indian borders.

Globalisation is therefore able to build synergies between innovation processes in the North and in the South, and between industrialized countries and developing ones. However, this positive image of co-creation exists in a context of fierce competition on “green” technologies, including the example of the photovoltaic industry, which clearly illustrates the risks and opportunities of globalisation.

The global photovoltaic industry is in chaos. Businesses are closing down in both Europe and China, and the installation of solar panels is in decline. The European Union initiated a standoff with China to persuade it to stop what it regards as “dumping”. At the time of writing, the EU has introduced a first tax on imports of Chinese solar panels and China has responded by threatening to tax various European products.

How did we arrive at this situation of a solar trade war where everybody ends up the loser, from solar energy innovators through to those who develop it? The EU has set targets for the consumption of solar energy and, as part of this effort, has subsidized the installation of photovoltaic panels. Consequently, Chinese companies have invested heavily in the production of panels and, due to easy access to credit and low labour costs, have brought down prices. This represents a valuable opportunity for Europe: it can achieve its objectives in terms of renewable energy at a lower cost; it can also install more solar panels than was originally anticipated and thus develop artisanal employment downstream in the sector. It also helps industrial employment in European countries that provide machinery and other intermediate products to Chinese manufacturers. Although conversely this means that Europe is losing ground in the globalized photovoltaic industry. Countries such as France, which have to rely on the production of panels to create industrial jobs in the solar sector, consider themselves as the major losers. They depend on the solar industry for the conversion of industries and industrial areas that are in major decline, and subsidize solar energy with this goal in mind. Given that Chinese companies hold about 80% of the European market for panels, policy makers are less willing to grant financial support to the solar industry during a period of budgetary crisis. Any such support to the solar industry is seen as support for Chinese industry.

While the globalisation of the photovoltaic industry, and more generally of “green” sectors—renewable energy, electric vehicles, new materials, etc.—can bring down the cost of new technologies and therefore promote their dissemination, and from this point of view is a driver for innovation, in parallel it also represents a challenge to the political support that is vital for the emergence of such technologies. Often, these new technologies incur—at least for a transitional period—an additional cost that requires compensation before their dissemination can take place. Globalisation also raises the fear of a collapse in the R&D effort of European companies in these new sectors, and more generally of American or Japanese ones. At the moment these companies account for the largest proportion of research efforts and patents worldwide, but will they continue to fund such investment in future if they cannot capture, today or tomorrow, the profits related to the production of new technologies?

What regulation of globalisation is necessary to ensure the dissemination of new "green" technologies and R&D efforts? Should we regulate it at all, or simply aim to change the outlook of politicians on this matter: after all, why shouldn't we accept and take full advantage of the massive importation of low-cost green technologies? What place is there for the "green race", i.e. the competition between countries on these new technologies, and what room is there for cooperation and coordination of public policies for R&D and support?

## 5 WHAT DEVELOPMENT MODEL FOR THE TWENTY-FIRST CENTURY?

*The economic golden age has profoundly affected industrial societies and different political ideologies. For today's policymakers, are the environmental challenges and the uncertainties about the future of growth indicative of the exhaustion of a development model, along with a lack of the necessary innovation to build a new one? Should we comprehensively rethink the notion of prosperity, or should we restart the economic machine? What innovations—social and technological—can offer hope in terms of sustainability for twenty-first century societies, and how can we create a fertile ground for such ideas? Do we need to rethink globalisation? Do we have to redefine the relationship between public power, the market and the individual to rebuild our social pact?*

How can public and private decision-makers collectively address these issues, at the national and international levels, and transform them into sustainable proposals for an innovative society? This general concern—which poses a challenge for the short, medium and long terms—will be addressed by the panelists of this final session, in terms of domestic, regional and global policies as well as from the perspectives of the economy, trade and development.

## REFERENCES


- Darvas, Z., Pisani-Ferry, J. and G. B. Wolff (2013). “Europe’s Growth Problem (and What To Do About It)”. Bruegel Policy Brief.
- Debonneuil, M. (2010). *L’économie Quaternaire, une croissance durable à construire*. Report of the Economic Analysis Council submitted to the Secretary of State for Planning and Development of the Digital Economy.
- Dietz, R. and D. O’Neill (2013). *Enough is enough. Building a sustainable economy in a world of finite resources*. Berrett-Koehler Publishers.
- Gordon, R. J. (2012). *Is US economic growth over? Faltering innovation confronts the six headwinds*, Northwestern University.
- Jackson, T. (2009). *Prosperity without growth? The transition to a sustainable economy*, report of the UK Sustainable Development Commission.
- Kaplan, D. (2013). “Au-delà des technologies”, *Le Monde*, 30 May 2013.
- Piketty, T (2011). “On the Long-Run Evolution of Inheritance: France 1820-2050”. *Quarterly Journal of Economics*, Issue 3.
- Radjou N., Prabhu, J. and S. Ahuja (2013). *Innovation Jugaad, redevenons ingénieux*. Éditions Diateino.
- Stern, N. and J. Rydge (2012). “The New Energy-Industrial Revolution and an International Agreement on Climate Change”. *Economics of Energy and Environmental Policy*, Volume 1: 1-19.Stern, N. (2007). *The Economics of Climate Change—The Stern Review*. Cabinet Office—HM Treasury.
- Stevenson, N. and J. Wolfers (2008). “Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox“. Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 39(1 (Spring), pages 1-102.
- Victor, P (2008). *Managing without growth*. Advances in Ecological Economics, Edward Elgar Publishing.


# FRIDAY, JULY 12

9.00-10.00: Registration

10.00-10.30: Welcome

10.30-11.00: Opening

Claude **Bartolone,** President of the National Assembly, France

Introduction: Laurence **Tubiana,** Director of the Institute for Sustainable Development and International Relations (IDDRI), France

11.00-12.30

## SESSION 1—HAVE OUR MODELS OF GROWTH ENTERED INTO AN EXHAUSTION PHASE?

Is the continued decline in the growth rates of many industrialized countries a sign that their growth model is exhausted? Does deindustrialization or the depletion of resources indicate that they are condemned to slow growth or even economic stagnation? The first plenary session will compare the analysis of the extent and causes of the "structural" economic crisis in these countries. It will also discuss the prospects for growth in industrialized countries and for convergence of emerging countries, particularly in a context marked by environmental stress. Can we expect a return to strong growth, despite or because of the necessary ecological transition? Can green technologies and green services launch a new wave of growth?

Moderator: Laurence **Tubiana,** Director, IDDRI, France

Robert **Boyer,** Institut des Amériques, France

Michèle **Debonneuil,** Administrator at the National Institute of Statistics and Economic Studies and Inspector General of Finances, France

Andrew **Simms,** New Economics Foundation, United Kingdom

Nicholas **Stern,** London School of Economics, United Kingdom

12.30-14.30: Free time for lunch

14.30-16.00

## SESSION 2—CAN WE BUILD A POST-GROWTH SOCIETY?

In the political discourse, economic growth and prosperity seem synonymous: we need more growth to create jobs, to invest in education and environmental protection, to reduce inequalities and ultimately to be wealthy. Given the depth of the economic crisis, support for economic activity is essential in the short term. However, in the medium and long term, are we doomed to continuous growth to ensure prosperity for all? What innovations are needed to make our societies resilient to the uncertainty of future long-term growth?

Moderator: Damien **Demailly,** coordinator of the New Prosperity programme, IDDRI, France

Laurent **Baumel**, Member of Parliament for Indre-et-Loire, France

Dan **O'Neill,** Center for the Advancement of the Steady State Economy (CASSE), United Kingdom

Jean **Pisani-Ferry,** Commissaire général à la stratégie et à la prospective, France

Lena **Sommestad**, former Minister for environment, Sweden

16.00-16.30: Coffee break

16.30-18.00

## SESSION 3—THE CONSTRUCTION OF INNOVATION

The world is undergoing profound change that will result in the building of a society that is different from that in which we live today. In this session the focus will be on innovations that are not technological in nature but have been proposed by entrepreneurs or citizen networks: such as the sharing economy, short supply chains, transition towns, 'human' companies, citizen funding, etc. Guided by highly diverse motivations (including economic, solidarity or environmental initiatives) advocates of such innovations redefine the traditional boundaries of economic and social spheres, of the production and consumption of goods and services, and of the relationship between citizens and public and private institutions. They propose new frameworks in which technological innovations can be deployed and reconfigured. In sectors as diverse as energy, food, transport and culture, we have already witnessed a shake up of conventional strategies by new organizations and new business models. Are the economic, social and environmental claims of these innovations credible? To what extent do they offer prospects for the renewal and redevelopment of economic activity? How can public action help to build a fertile ground for social innovation that would support and not stifle such advancement?

Moderator: Michel **Colombier,** Scientific Director, IDDRI, France

Nicolas **Colin,** Inspector of Finance, France

Benoît **Hamon,** Minister Delegate at the French Ministry of the Economy and Finance, with special responsibility for Social and Solidarity Economy and Consumption

Stéphane **Fourier,** Supagro Montpellier, France

Rob **Hopkins,** Transition towns, United Kingdom

# SATURDAY, JULY 13

9.00-9.30: Registration

9.30-11.00

## SESSION 4—A NEW GLOBAL CONTEXT FOR INNOVATION

Globalisation and the arrival of large emerging countries onto the international scene are an undeniable feature of the early twenty-first century; innovation must therefore be thought of in this context. Is this new global situation an opportunity for the production and diffusion of technological and social innovation? Are we witnessing an emergence of a new geography of innovation that clearly conflicts with the notion that "the North invents while the South copies" and is increasing our collective capacity for innovation? Does economic exchange enable the costs of environmental technologies to be reduced? Or, is globalisation primarily synonymous with conflicts over intellectual property and trade war, as illustrated by the case of the solar industry? This session will question the need for better regulation of globalisation and for the building of innovative societies, and give consideration to the necessary tools.

Moderator: Tancrède **Voituriez,** Director of the Governance Programme, IDDRI, France

Patrick **Itschert,** European Trade Union Confederation, Belgium

Navi **Radjou,** Strategy Consultant, United States

Dirk **Pilat,** Organisation for Economic Co-operation and Development (OECD), France

Teresa **Ribera,** former Secretary of State for Climate Change, Spain

11.00-11.30: Coffee break

11.30-13.00

## SESSION 5—WHAT DEVELOPMENT MODEL FOR THE TWENTY-FIRST CENTURY?

The economic golden age has profoundly affected industrial societies and different political ideologies. For today's policymakers, are the environmental challenges and the uncertainties about the future of growth indicative of the exhaustion of a development model, along with a lack of the necessary innovation to build a new one? Should we comprehensively rethink the notion of prosperity, or should we restart the economic machine? What innovations—social and technological—can offer hope in terms of sustainability for twenty-first century societies, and how can we create a fertile ground for such ideas? Do we need to rethink globalisation? Do we have to redefine the relationship between public power, the market and the individual to rebuild our social pact?

Moderator: Laurence **Tubiana,** Director, IDDRI, France

Pascal **Canfin,** Deputy Minister for Development, France

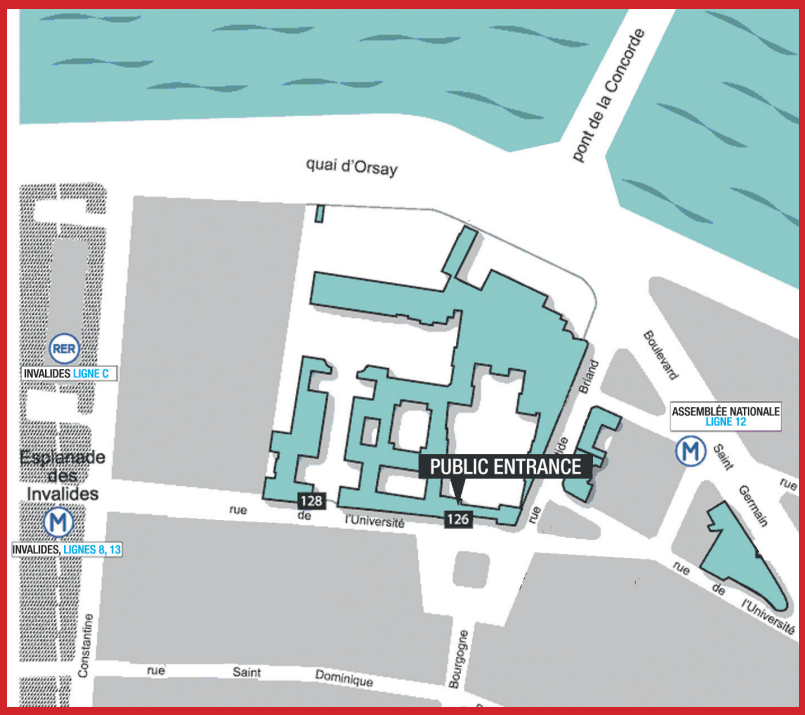
Luciano **Coutinho,** Brazilian Development Bank ((BNDES, O Banco Nacional do Desenvolvimento), Brazil

Geórgios **Papandréou,** Former Prime Minister, Greece

Jeffrey **D Sachs,** Earth Institute at Columbia University, United States

13.00-13.30: Conclusion

Jean-Marc **Ayrault,** Prime Minister, France




Contact:
Élise Coudane
elise.coudane@iddri.org
01.45.49.76.67

Media Contact:
Delphine Donger
delphine.donger@iddri.org
06.22.70.05.65

**www.iddri.org**
Follow IDDRI on twitter (@iddrilefil)

IDDRI
SciencesPo.

With the support of
ASSEMBLÉE NATIONALE

Media Partner
Les Echos