### **Executive Summary**

In France the term Green Economy "usually encompasses two types of activities: classic economic activities realised with less polluting or less energy intensive processes and ecological activities striving to protect the environment or to manage natural resources. However, precisely defining the concept of "sustainable growth", let alone measuring it, turns out to be much more difficult. In fact, there is no single definition of it. Nevertheless, how to tackle the challenge of "a different growth" was a preoccupation for each person we encountered in the context of this study, no matter in which sector it was working in.

In advance compared to other countries, France measures the green economy's contribution in terms of employment and production. The green economy's potential is real, in France and abroad, due to the emergence of new markets. Companies in these sectors, in conjunction with the nascent social business concept, provide concrete solutions addressing the economic, social and environmental aspects of sustainable development, thereby showcasing a model of sustainable and inclusive growth.

In comparison with its commercial partners France has equal, if not superior, assets to boast and therefore the potential to be successful: a plentiful human capital and territory, innovative know-how... Besides, an explicit political will exists to engage on a path of sustainable growth. The private sector expects this political ambition to be translated into the provision of a stable legal framework with a long-term vision, thereby creating favorable conditions for investment and product positioning. If these opportunities are not to be missed politicians will need to act quickly.

The interviews conducted in seven countries – amongst which France – with a diversified set of professionals from different sectors unanimously show that change is happening that new values emerge in society: well-being, preservation and creation of a social link, protection of the environment, quality of life, health, employment and territorial planning.

Whether the companies are actors of the "green economy" or not they participate all in one way or the other in a more sustainable growth. They are all subject to ever stricter environmental constraints such as the rarefaction of natural resources or the price rise of commodities that force them to adapt, for example by lowering their energy consumption. They also take more and more into account the preoccupations of their stakeholders, the investors asking for sustainable development, the consumers that want to consume responsibly and the employees that want their personal values to be aligned with those of the company. Whereas responsible consumption is confirmed as a lasting trend, the price remains a determining factor for households.

Is this "other growth" compatible with the classic mode of mass-production with which it coexists?

### **Evolving economic models**

This question cannot today be answered with certainty however one can observe the emergence of new solid economic models that do not solely rest on the search for profits, return maximization and the creation of monetary value. The so called "circular economy" and the "sharing economy" are two complementary models that do not only allow reducing the negative environmental impact but that also foster positive social impacts (such as collaboration, trust, solidarity...).

Our economy is progressively becoming greener, sector by sector... But our environment also evolves very quickly: on the one hand it appears to be more complex and uncertain every day; on the other hand the economy's stakeholders, citizens, companies, states, local authorities and NGOs grow more and more interdependent; Finally, the patterns of states' financial intervention evolve and adapt to budgetary constraints by focusing on public works in key sectors but also by contributing to dedicated financial guarantee schemes. In turn, individuals wanting to invest their savings in a meaningful way have driven the remarkable growth of crowdfunding.

The "green economy" is not a sector as such it is rather characterized by its transversality and its diversity. The necessarily rough analysis of the seven visited countries has highlighted four operational modes facilitating green growth.

## Structure and circulate information to understand and anticipate

The diffusion of ideas and information is fundamental for the "green economy", as the common knowledge base is only being constituted. The dispersion of information pieces worsened by the new digital technologies that produce a wealth of unreliable, unstructured and unranked pieces of information calls for an aggregation the knowledge that is necessary to the stakeholders of the "green economy".

For the benefit of citizens and corporates, the relevant information needs to be selected and filtered, structured in an objective joint database. Further, credible advocates passing on relevant and intelligible information and sharing best practices need to emerge. Finally, the constitution of networks is a key element for the propagation of best practices and contributes to the realization of economically viable industrial solutions.

### Spark enthusiasm to involve all stakeholders

For the actors of the economy to adhere and to have a positive perception of ecology it is necessary to show them the opportunities arising for each of them from sustainable growth. The implication of the citizen is of paramount importance: showing him that his opinion is valued when taking decisions or identifying solutions to overcome protests (e.g. "not in my backyard" phenomenon), showing him that he can have a financial interest to support the project (e.g. *via* "crowdfunding") ...

The search for synergies, the constitution of technical networks and partnerships, the fostering of cooperation and mutual aid are the next challenges to tackle.

Communication amongst physical or virtual communities and neighbourhoods represents the best opportunity for citizens or corporates to generate a genuine adherence to the common causes.

## Build upon a principle of proximity to free the energy of the actors engaged in the field and to create or restore links among them

The new "virtual proximity" should be taken advantage of in order to encourage the interaction or connection of the stakeholders amongst them. The digital world can act as a powerful multiplier of diverse forms of collaborations such as platforms of the sharing economy, social networks and discussion forums.

Due to the proximity in space and resources it implies it seems that local administration levels are the most appropriate forms of governance to effectively take on the new challenges of cooperation, exchange of information and best practices, development of know-how and competences, but also for the exchange of raw materials (as a form of local industrial ecology) for example.

These initiatives exist because the stakeholders benefit from them: the local administrations, the NGOs, the corporates (acceptance of change at the local level, emergence of innovations...). The constitution of networks mobilises the areas involved and in the end increases every partner's turn-over. Elected representatives, local administrations and financial institutions have an important role to play as initiators, moderators, translators and assemblers of local networks and information platforms.

## Turn sustainable development into a sales argument or even into a competitive advantage

In the course of our visits to other countries, we witnessed a wide range of activities promoting national companies, orchestrated by governments or large corporates that are conscious of the international "green" markets. In contrast, despite the recognized quality of French products, many of these sectors lack visibility. Internationalisation being of strategic importance to our corporates and SMEs in particular they need to be helped in promoting their know-how and expertise. Several levers are available.

First and foremost, give an identity to French know-how and experience. Some initiatives start to emerge, such as "The French offer for sustainable cities", the "French tech" ... These need to be consolidated and professionalised.

Further, French norms and labels need to be pushed internationally by using France's influence and by proposing market studies that are more adapted to SME's needs.

Finally, France – still very much relying on its tradition of cultural and diplomatic influence – will progressively need to change its appreciation of lobbying.

# Eco-innovation, regulation and financing as instruments of sustainable growth

#### **Eco-innovation**

Eco-innovation is defined as the production, assimilation or exploitation of innovation in products, processes, services or managerial techniques with aim – over its entire life-time – to substantially reduce environmental risks, pollution and other negative impacts linked to the use of necessary resources.

While the developments have been considerable in the past years, many more positive paradigm-shifts are still to come thanks to eco-innovations: renewable energies, power storage... one of current big challenges is the deployment of smart grids, whose aim it is improve the efficiency of electrical systems (measure, monitor and anticipate flows) and above all to connect consumers and producers. Beyond the efforts on upgrading the electrical grid, improving energy efficiency involves all products, processes and uses in industry, transport and buildings... that allow for an optimisation of resources employed, a better utilization, a disregarded source or possibility of recovery (e.g. waste heat). To encourage the emergence and broad use of eco-innovations but also to allow companies of the "grey economy" to become more "green" open source or open innovation strategies can represent a powerful lever.

If they are well channeled research and eco-innovation will significantly alter paradigms while allowing our societies to constantly reduce our consumption of resources

Eco-innovations also concern working methods, organisational aspects, marketing, human resources and the service sector as a whole. As the "green economy" is characterised by its transversality, its diversity and the evolutions it induces, shared competences become necessary: new working methods made of communication and collaboration; ability to live in a complex universe by developing a capacity for adaptation, perseverance and resilience. The overall aim certainly is to find and apply working methods that take advantage of the subject's interdisciplinarity, that develop competences enabling action.

Adapting the working organisations fosters creativity and innovation thanks to a positive, attractive and ambitious vision, to the development of enjoyable up-to-date learning methods and the strong implication of superiors.

### **Regulation**: an unsuspected lever

Driven by an ever more constraining regulatory framework (in terms of environment and public health) and a growing mindfulness of the citizens the economic weight of "green markets" has sharply increase at worldwide level. Labels, professional rulebooks etc. encourage virtuous corporate behavior and influence the consumer's behavior. In environmental matters it is hence the regulation and norms that create markets. However, it would be sensible to rethink them in order to transform them into more flexible simple and progressive tools that are linked to an effective controlling power to prevent distortions of competition. The state has already adopted this strategy, notably in the "Modernising the Public Action" legislation.

### **Financing**

In view of the challenging energy transition ahead new financing models come to the forefront. Supporting the energy and environmental transition is for example one of the focus areas the state has assigned to Bpifrance in its 2014-2017 strategic plan. The initiative of CDC Climat of the Groupe Caisse des Dépôts aims at financing the energy efficiency projects in energy intensive companies. Other infrastructure investment funds invest in renewable energy infrastructures or in projects linked to the energy and environmental transition. Green bonds are an interesting response to financing challenges of climate change.

However, the investment needs linked to the energy and environmental transition are often small whereas the major funds only finance large projects and the institutional investors tend to only invest in large funds. The finance industry

needs to adapt – beyond the financing of renewable energy – to fund the energy and environmental transition taking into account the granularity of the sector.

An inciting green fiscal regime can also represent a powerful lever of policy.

Finally, it is necessary to bear in mind that the public financing interventions of the state evolve and adapt in order to support innovation efficiently. As a consequence, the state and its services focus their spending on key sectors while structuring guarantee schemes but also by funding guarantee funds.