



# CLIMATE CHANGE AND BUSINESS OPPORTUNITIES

climabiz





Title: "Climate Change and Business Opportunities"  
"climabiz" LIFE+ project (LIFE08 ENV/GR000552)  
ATHENS 2011



*This report was prepared in the framework of the European project LIFE+ Environment Policy and Governance, titled "Financial Institutions: Preparing the Market for Adapting to Climate Change – climabiz" (LIFE08 ENV/GR/000552), which is implemented by Piraeus Bank in partnership with WWF Greece and Facets. The Project is 50% co-financed by the European Union.*

EDITING TEAM:

**Mirasgedis S., Hontou V., Sarafidis Y., Gakis N.**

WORKING TEAM:

**PIRAEUS BANK**

**GREEN BANKING SECTOR**

**Zavras Vr.**, General Manager, Head of Project

**ENVIRONMENT UNIT** [ *contact info: [environment@piraeusbank.gr](mailto:environment@piraeusbank.gr)* ]

**Dimopoulos D.**, Project Manager

**Xenogianni F.**, Climate Change Risk and Opportunity Manager

**Frantzi S.**, Education and Communication Manager

**GREEN BANKING PRODUCTS DIVISION**

**Primikiri El.**, Deputy Director, Green Banking Products Division

**Antoniadis G.**, Climate Business Adaptation Officer

**FACE<sup>3</sup> TS** [ *contact info: [vhontou@facets.gr](mailto:vhontou@facets.gr)* ]

**Lalas D.**, Scientific Responsible

**Mirasgedis S.**, Project Team Member

**Hontou V.**, Project Team Member

**Sarafidis Y.**, Project Team Member

**Gakis N.**, Project Team Member

**Vounatsi E.-M.**, Project Team Member

**WWF GREECE** [ *contact info: [c.liarikos@wwf.gr](mailto:c.liarikos@wwf.gr)* ]

**Liarikos K.**, Policy Advisor

**Maleganos Y.**, Climate Business Network Manager

**Maragou N.**, Administrative Support

**Plitharas A.**, Climate Change Officer

**Sarris P.**, Administrative Support

Photos: Dimitrios Dimopoulos and Piraeus Bank Archive

© Copyright notice

*This report or excerpts from it may be used only for educational, non-commercial purposes, with the appropriate citation: Facets, Piraeus Bank, WWF Greece, "Climate Change and Business Opportunities". LIFE+ Project "climabiz". Athens: 2011.*

# CLIMATE DRIVES BUSINESS

**THE AIM OF CLIMABIZ IS TO DEVELOP THE NECESSARY MEANS IN ORDER TO QUANTIFY THE IMPACTS, BOTH POSITIVE AND NEGATIVE, OF CLIMATE CHANGE ON GREEK BUSINESSES.**

The current report comprises the executive summary of a more extensive report elaborated within the framework of the climabiz<sup>1</sup> European project. Climabiz, is the acronym of the project that derives from the words "climate" and "business". It is implemented by Piraeus Bank, Facets and WWF Greece and is co-financed by the European Commission and more specifically the financial instrument for the environment LIFE+<sup>2</sup>. The full project title is "Financial Institutions: Preparing the Market for Adapting to Climate Change" and its duration is three years (2010-2012). The aim of climabiz is to develop the necessary means in order to quantify the impacts, both positive and negative, of climate change on Greek businesses. The current executive summary and the extensive report comprise two of the deliverables of the climabiz project that aim to quantify in monetary terms the investment opportunities deriving from climate change in the Greek market.

This analysis is particularly important, especially today because of the financial and social crisis that Greece is currently undergoing. The current report provides a prospect for growth and prepares businesses for a brighter future.

## THE SCOPE OF THE REPORT

Climate change is one of the greatest environmental challenges of our time and is already causing significant impacts on the natural and socio-economic environment, which is expected to intensify in the coming decades. These impacts span across a wide range of activities and show considerable regional variations in their type and intensity, depending on the observed changes in the climate and the activities carried out in the region. Mostly, they lead to the degradation of the natural ecosystems and to socio-economic losses, highlighting climate change as one of the major environmental problems facing humanity.

However, this generally negative environment may give rise to business opportunities, whose early identification may contribute to economic growth and eventually to mitigating climate change and its effects. Business opportunities may emerge due to:

- **the new climatic conditions** that will prevail in a region, which may be favourable for the pursuit of particular activities,
- **the regulatory framework** adopted for managing climate change and reducing greenhouse gas emissions, which favours the penetration of efficient and clean technologies, creating new markets, such as carbon markets, etc,
- **the change in the behaviour of consumers**, who, recognizing the importance of environmental issues and especially climate change, modify their habits and adopt new consumption patterns, increasing the demand for specific products and services,
- **the technological innovations** adopted by businesses in order to adapt to the new circumstances and gain market shares.

This report focuses on the business opportunities that may arise due to climate change in the south-east Mediterranean and especially in Greece over the next 10-20 years. It examines selected economic sectors, which may be positively affected either by the new climatic conditions or by the new regulatory framework for managing climate change, and -where possible- provides quantitative estimates on the possible growth of the market and its turnover in the next decade.

<sup>1</sup> For more information on climabiz please visit [www.climabiz.gr](http://www.climabiz.gr)

<sup>2</sup> For more information on LIFE+ please visit <http://ec.europa.eu/environment/life/index.htm>



In general, the emergence of investment opportunities in an economic sector due to climate change requires the existence of one or more of the following conditions:

- Reduction of the production costs in certain economic sectors (e.g. the new climatic conditions favour the production of agricultural products used as raw material in certain economic sectors).
- Increased demand for a sector's products and thus increased revenue for that sectors' businesses, as a result of the new climate conditions (e.g. sales of air conditioners, soft drinks, ice cream, etc.), the regulatory framework to manage climate change (e.g. energy saving systems), new consumption patterns (e.g. organic products), etc.
- Gaining competitive advantage over competing sectors, who in the domestic or international market suffer financial burdens from climate change.

In this report, the sectors examined emerged after a preliminary review of all entrepreneurial activities taking place in Greece and that present comparatively more investment opportunities associated with climate change. Those sectors are as follows:

- Renewable energy sources for generation of electricity
- Infrastructure sector-Energy efficiency in buildings
- Financial sector and the carbon markets
- Insurance sector
- Organic farming
- Biofuels
- Food and drinks sector
- Telecommunications
- Tourism



# THE METHODOLOGICAL FRAMEWORK

**FOR THE QUALITATIVE ASSESSMENT OF THE BUSINESS RISK AND OPPORTUNITY ASSOCIATED WITH CLIMATE CHANGE BASED ON THE 4 DESCRIBED PARAMETERS (CLIMATIC CONDITIONS, REGULATORY FRAMEWORK, CHANGING CONSUMER BEHAVIOUR, POTENTIAL INTEGRATION OF INNOVATION), WE USED A 7-POINT QUALITATIVE SCALE**

The methodological framework applied to analyse the opportunities per examined economic sector includes the following steps:

1. Recording of the current state of the sector and its prospects based on a scenario of expected development.
2. Identification of the parameters associated with climate change that affect the growth of the sector and of the manner in which they affect the economic performance of businesses active in this sector (i.e. reduction of costs, increase of revenue, creation of competitive advantage).
3. Assessment of the impacts (positive or negative) on the development of the sector due to the changing climatic conditions based on future climate scenarios.
4. Assessment of the impacts (positive or negative) on the sector's development due to the regulatory framework adopted for tackling climate change.
5. Assessment of the impacts (positive or negative) on the sector's development, owing to the diversification of consumption patterns and changing consumer behaviour.
6. Assessment of the feasibility of incorporating innovations in businesses of certain sectors related to the mitigation and/or adaptation to climate change.
7. Overall assessment of the growth prospects for the examined sector.

In every examined sector, steps 1-7 are first analysed qualitatively, and where possible quantitatively, using sectoral studies, statistical models, etc. For the qualitative assessment of the business risk and opportunity associated with climate change based on the 4 described parameters (climatic conditions, regulatory framework, changing consumer behaviour, potential integration of innovation), we used a 7-point qualitative scale (**Table 1**). Note that it is possible for a sector to be affected by climate change but not in a predetermined manner.

**TABLE 1** Qualitative assessment of risks and opportunities associated with climate change at sectoral level.

☺☺☺	There are very positive prospects for the sector
☺☺	It is possible to see a significant positive impact on the market
☺	Rather positive impact on the market
☹☹☹	There are very significant negative impacts for the sector
☹☹	It is possible to see a significant negative impacts on the market
☹	Rather negative impact on the market
~	Overall, small variations are expected in the sector (positive or negative)

The following sections of the report present the major findings of the analysis at sectoral level.

## RENEWABLE ENERGY SOURCES IN ELECTRICITY PRODUCTION

Electricity production from RES presents significant investment opportunities, mainly because of the very favourable regulatory framework adopted at the European Union level, in order to drastically reduce greenhouse gas emissions (**Table 2**). Achieving the national targets set in this framework requires the implementation of significant sectoral investments in the next decade and the addition of approximately 10,000 MW of RES to the power system, up from about 4,300 MW today (including large hydroelectric plants). This undoubtedly represents a huge expansion of the market, particularly with regard to wind energy (the installed capacity of wind farms is expected to sextuple within a decade) and PV systems. The investments required for the construction of these units reach in total about €16.8 billion for the entire decade 2010-2020. Simultaneously, a market for the operation and maintenance of these units will develop, whose turnover is expected to grow from €43 million in 2010 to €505 million in 2020.

Based on the above, the business opportunities emerging in the sector concern:

- Businesses engaged in the production and trading of electricity from RES.
- Construction companies engaged in developing renewable energy projects and the related infrastructure and supporting projects.
- Businesses producing RES equipment.
- Businesses providing related services.

**TABLE 2** Qualitative analysis of parameters related to climate change that affect the development of RES in the electricity sector.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	~ / ☹☹	Small variations in the productivity of most RES technologies. Relatively significant reduction in the productivity of hydroelectric plants.
Regulatory framework	☺☺☺	Particularly favourable framework for the development of RES, particularly wind and PV projects.
Consumer behaviour	☺	Increased demand for green / clean energy.
Technological innovation	☺☺	Penetration of RES for the reduction of the energy costs and ecological footprint of businesses. Increased demand for RES equipment.

## INFRASTRUCTURE SECTOR-ENERGY EFFICIENCY IN BUILDINGS



The favourable regulatory framework for promoting energy efficiency is the most important parameter for the sector's development (**Table 3**). Especially the upgrade of the existing buildings to energy efficient buildings is the biggest challenge for the sector, given the downturn in construction activity over the last years owing to the economic crisis.

Based on the energy-saving measures included in the 1st National Action Plan for Energy Efficiency, the total investments in this sector throughout the decade 2010-2020 are expected to reach €7.1 billion. In addition, the construction of new energy efficient buildings, namely zero-E buildings, which is now set as a binding target in various developed countries and in the European Union overall (EU Directive 2010/31) is especially interesting.

In this framework, various business opportunities are expected to arise in particular for:

- Businesses engaged in the production and trading of solar panels.
- Businesses producing and selling energy-saving equipment and materials.
- Businesses in the non-metallic minerals sector involved in the production of insulation construction material.
- Construction companies.
- Businesses providing related services.

**TABLE 3** Qualitative analysis of parameters related to climate change affecting the implementation of measures to increase the energy efficiency of buildings.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	~ / 😊	The increased demand for air conditioning and cooling is expected to have a positive effect on the market. The increase of natural disasters due to extreme weather events entails an increase in the turnover of the construction sector for repairs, etc.
Regulatory framework	😊😊	Favourable framework for implementing energy-saving interventions and the integration of renewable energy systems in buildings. Expansion of the market for the construction of buildings with very low or zero energy consumption.
Consumer behaviour	😊	More and more consumers focus on wise energy use in buildings, purchasing energy efficient equipment, etc.
Technological innovation	😊	Businesses implement energy-saving measures, mainly aimed at reducing their operating costs. Demand for innovative products and services related to energy saving.

## FINANCIAL SECTOR AND THE CARBON MARKETS

As shown in **Table 4**, the financial sector may be both positively and negatively affected by climate change. Undoubtedly, the biggest challenges for the sector are associated with the development of the carbon markets and the financing of projects for the application of clean technologies and greenhouse gas emission reduction, which, under certain conditions, can also generate emission rights that are tradable in the emissions stock exchange.

Of particular interest are the auctions for emission rights, which gain increased importance in the third operational phase of the European trading scheme, both due to the value of transactions to be carried out and because part of the proceeds will be allocated to actions to reduce greenhouse gas emissions. In particular, for Greece, preliminary estimates indicate that the revenues from emission rights auctions will be around € 1 billion per year over the period 2013-2020. The Directive 2009/29 stipulates that at least 50% of these revenues should be spent on actions such as the strengthening of RES, afforestation, reforestation, the development of low carbon transport, energy saving, providing financial support for addressing social issues in low income households, etc. Therefore, a huge market is being created, where financial institutions can participate by means of trading rights; providing financial products for trading rights; enhancing the liquidity of the system; funding projects for the production of emission rights that will be traded in the trading system; providing various trading services; participating in the financing of projects to be implemented using the proceeds of the auctions, etc.

**TABLE 4**  
Qualitative analysis of parameters related to climate change, affecting the financial industry.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	☹️	Changing weather conditions can affect the infrastructure and operating costs of banks to a relatively small degree. They can cause charges to bank customers and thus result in bad debts. To the extent that climate change will slow economic growth, it is also expected to affect the profitability of banks.
Regulatory framework	☹️ / 😊😊	Increased risk from the additional charges incurred by bank customers due to policies for tackling climate change. Great opportunities for the funding of new projects for the reduction of emissions, the development of micro-banking, operation in the carbon markets, etc.
Consumer behaviour	😊	Potential for the improvement of the reputation of banks through the undertaking and/or funding of actions that tackle climate change.
Technological innovation	😊	Creating and promoting new banking products.



## INSURANCE SECTOR

**INTERNATIONALLY, THE INSURANCE INDUSTRY SEEMS TO BE PREPARING TO TACKLE NEW CHALLENGES.**

The insurance sector may also be affected by climate change in various ways (**Table 5**). The most significant opportunities are expected to rise from the possibility of adjusting premiums due to the risks arising from changing climatic conditions and from the need for new insurance products for renewable energy projects and other programmes aimed at reducing greenhouse gas emissions and adapting to climate change. Carbon markets are another potential area of operation for insurance companies.

Internationally, the insurance industry seems to be preparing to tackle new challenges. Increasingly analyses are being published on the impact of climate change on the economics of the industry, while systematic efforts are made to develop methods and tools for integrating the losses expected to result from climate change for different customer segments. Furthermore, the insurance industry is analysing the opportunities arising from the implementation of policies to manage the phenomenon, the development of carbon markets, etc. In Greece, the sector adjustment to the new conditions/challenges seems to be slow.

**TABLE 5**  
Qualitative analysis of parameters relating to climate change, affecting the insurance industry.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	☹☹ / ☺☺	Significant risk as the risk assessment of customers becomes more difficult and increases the chance of failure. Increased reinsurance costs and macro-economic risk. Significant opportunities from the price increase of premiums, for new products and the expansion of clientele.
Regulatory framework	☺☺	Marketing of insurance products for renewable energy projects and other programs aimed at reducing greenhouse gas emissions and adapting to climate change. Operation of insurance companies in the carbon markets.
Consumer behaviour	☺	Increased demand for insurance products because of the direct and indirect risks of climate change.
Technological innovation	☺	Creating and promoting of new insurance products.





## ORGANIC FARMING

Changing consumer behaviour and the demand for quality and safe agricultural products is the major driving force for the development of organic farming, at least in developed economies (Table 6). Greece, which still has a relatively large agricultural sector, offers significant potential for the development of organic farming, which can contribute to the enhancement of agricultural revenue:

- Through the production of quality products that can be promoted to demanding markets and achieve higher prices.
- Due to the fact that, as a rule, organic farming is labour-intensive, compared to the respective conventional farming.

It is likely that by 2020, for 360,000 hectares in Greece, i.e. 11.7% of the total cultivated area, to be cultivated using organic methods.

**TABLE 6**  
Qualitative analysis of parameters relating to climate change and affecting the growth of the organic farming products market.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	Non available	Potentially important impact (positive or negative) on organic farming, although analytical quantitative data is not available.
Regulatory framework	😊	Positive impact given that it is combined with the demand for a decrease of greenhouse gas emissions and particularly of N2O in farming (Decision 406/2009/ EC).
Consumer behaviour	😊😊	The demand for quality and safe products increases at least in developed economies.
Technological innovation	-	No important effect is apparent.



## BIOFUELS

With regard to biofuels, the regulatory framework set out at the EU level is the key driver for the development of this market (**Table 7**), given that their use in road transport is considered a key policy for the decrease of greenhouse gas emissions. In Greece, there is significant potential for the development of the biofuel market, particularly as regards biodiesel. It is estimated that by the end of the current decade the net annual turnover of the sector could approximate € 210 million.

**TABLE 7**  
Qualitative analysis  
of parameters relating  
to climate change and  
affecting the growth  
of the biofuel market.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	Non available	Potentially important impact on energy crops, although analytical quantitative data is not available
Regulatory framework	😊😊😊	Particularly favourable framework for the development of energy crops and biofuel production, as particular penetration quantitative targets for biofuel are set.
Consumer behaviour	-	No important deviation in the behaviour of consumers is apparent with regard to biofuels.
Technological innovation	😊	Businesses are interested in the use of biofuels as an energy source for the reduction of their ecological footprint.





## FOOD AND BEVERAGE INDUSTRY

Climate change affects the food and beverage industry, creating potential risks for some farming businesses that process and trade farming products, mainly due to the adverse effect of climatic conditions on the availability of raw material and secondly due to the regulatory framework. However, opportunities can arise, (Table 8) mainly for businesses that:

- Change/expand their business with products for which demand will increase under future climate conditions.
- Use a different resource/raw material type that is less vulnerable to future climate.
- Promote products whose life cycle involves lower carbon emissions, by taking advantage of the new consumption patterns that are gradually adopted.
- Adopt new technologies and techniques for the transportation and use of raw material, for the productive processes and for the packing and transportation of products.

**TABLE 8**  
Qualitative analysis of parameters relating to climate change and affecting the food and beverage industry.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	☹☹ / ☺☺	Significant risk for several food industries that process agricultural products or use raw materials of such origin. Furthermore, there is a risk for food industries with significant water consumption, as well as for the majority of beverage industries that also require large amounts of water. Significant opportunities to increase sales of certain commodities (ice cream, soft drinks, juices, bottled water) because of global warming.
Regulatory framework	☹ / ~	Few units have to follow the restrictive terms of the regulatory framework as to their emissions. Possible indirect negative effect due to the increased cost of energy from mandatory membership in the European Emission Trading System of energy units.
Consumer behaviour	~ / ☺	High likelihood of increased demand for food products and beverages with a reduced "carbon footprint" and consequent improvement of the environmental profile of their production business.
Technological innovation	~ / ☺	The effort to reduce the "product's carbon footprint" leads to the adoption of new techniques in the use and transport of raw material, the production and packaging of products, etc., the reduction of energy consumption during the productive process and product transport etc. (green supply chain)

An indicative estimate of the opportunities that can arise in the industry due to climate change is apparent from the examination of the domestic market as regards soft drinks consumption and how this is affected by temperature. Based on the analysis performed, it is evident that the change of climate conditions for 2021-2050 compared to the historical climate conditions for 1961-1990 may lead to an increase of the value of sales of the average unit of the sector of up to 14% annually. This represents an additional turnover for the sector of € 36-53 million per year.



## TELECOMMUNICATIONS

Telecommunications is one of the most dynamic industries internationally. A range of innovative products and services now marketed by telecommunications companies can help reduce traffic, increase distance working and allow a more efficient control of various processes in buildings, industries etc., thus promoting energy saving and the reduction of greenhouse gas emissions in many sectors of the economy. These products and services, for which demand is increasing, can be an important source of additional revenue for the sector (**Table 9**).

In a recent study, Vodafone Greece and Accenture (2010)<sup>3</sup> presented detailed estimates for the potential offered by mobile telephony smart applications for energy saving and the reduction of greenhouse gas emissions, and the development potential of such a market in Greece. Specifically, this study highlights 16 mobile telephony applications, whose implementation in Greece will contribute to the reduction of greenhouse gas emissions by 6.4 Mt CO<sub>2</sub>eq annually and the reduction of energy costs by € 1.4 billion annually. For this purpose, 13.6 million new mobile connections are required, which will undoubtedly contribute to a significant growth of the market.

**TABLE 9**  
Qualitative analysis  
of parameters relating  
to climate change  
and affecting the  
telecommunications sector.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	☹☹	Destructions in the networks due to extreme weather phenomena and increase of premiums. Increased energy needs for air conditioning.
Regulatory framework	☹	Increased cost for electricity due to the operation of the emissions trading scheme.
Consumer behaviour	☺	More and more consumers are familiar with the use of telecommunication products and applications.
Technological innovation	☺☺☺	A great potential for the creation of new products that will contribute to the reduction of greenhouse gas emissions in various sectors of the economy.

<sup>3</sup> Vodafone Greece and Accenture (2010). Carbon Connections: Quantifying mobile's role in tackling climate change.

## TOURISM

The tourism industry is another typical example of an economic activity that is affected in various ways by climate change (**Table 10**). The main opportunities and risks faced by this sector concern climatic conditions per se, given that climate is a key parameter for the choice of a tourist destination.

This report attempts a qualitative analysis of the effects of climate change in Greek tourism. According to the results of this analysis:

- The warming of the future climate in the high tourist season (May–September) and in general the change of other climatic parameters, may lead to a decrease in the TCI rates (an index quantifying the suitability of a region for tourist activities) in all climatic zones of the country. Because of this decrease, overnight stays during high tourist season in the future climate are reduced in comparison to the overnight stays of the historic climate, in all climatic zones. On a national level, the reduction of the number of overnight stays is 14%.
- The improvement of rates of climatic parameters in the future climate during the low tourist season may lead to an increase of tourism in comparison to the historic climate. On a national level, the increase may be 5%.
- On an annual basis, the increase of overnight stays during low tourist season may not be sufficient to offset the reduction of the number of overnight stays during the high tourist season. Thus, it is estimated that because of climate change tourism will be probably reduced up to 9%.

**TABLE 10**  
Qualitative analysis  
of parameters relating  
to climate change and  
affecting tourist activity.

Parameters	Qualitative assessment	Remarks
Change of climate conditions	😊 / 😞😞	Change of the duration of the tourist season.
Regulatory framework	~	The increase of air transport costs due to the trading scheme is expected to be relatively small and is not expected to essentially affect tourist activity in the immediate future (up to 2020).
Consumer behaviour	~	No significant alteration in consumer behaviour is apparent as to the choice of tourist destination.
Technological innovation	😊	Adjustment to new climatic conditions and improvement of environmental performances of the sector units create opportunities for attracting new customers.

## MAIN CONCLUSIONS

Although climate change constitutes one of the major environmental problems of our time, affecting in a negative way the economy, the ecosystems and finally the lives of billions of people; at the same time it creates opportunities in a series of economic sectors. The timely detection and grasping of those opportunities could lead to the reduction of the negative impacts of climate change and the adoption of a new and more sustainable development model. The aim of the current report was the promotion of such opportunities as regards the Greek economic sectors.

According to the analysis conducted, four are the key parameters that will possibly lead to business opportunities related to climate change.

First, the new climatic conditions that will prevail in the region of southeastern Mediterranean are likely to benefit certain economic activities. For example, the expected temperature rise could lead to an increase of product sales in the food and beverage industry (e.g. soft drinks, bottled water, ice creams etc.). Furthermore, it is likely that climatic conditions will contribute to the increase of tourism activities during the winter season if, of course, the infrastructure can support such a change (e.g. room capacity). Additionally, in the primary sector the impacts of climate change are not one-dimensional and it is possible that certain crops will be more productive or become more expensive due to the reduced productivity at an international level. At the same time, the more frequent extreme weather events provide an incentive for the insurance sector to promote new insurance products.

The regulatory framework that has been adopted and implemented for the reduction of greenhouse gas emissions, by the European Commission and International Organisations (e.g. United Nations Framework Convention on Climate Change, Kyoto Protocol) creates favourable conditions for investments in renewable energy (where Greece has a significant potential), in the infrastructure sector because of the energy efficiency requirements in buildings, in biofuels and so on so forth. In addition, new mechanisms are being developed within this framework, like carbon markets, that could comprise a preferential field for the financial and insurance sectors.

Consumer patterns also change as awareness of climate change raises, and thus the purchasing of environmentally friendly products provides an additional business opportunity. Typical examples include the increase in demand for organic products, for carbon neutral products and for clean energy. A new opportunity is, therefore created for businesses belonging to different business sectors to develop products for new target groups of consumers both in Greece and abroad.

Finally, the need for tackling climate change has led many businesses to prefer technological innovations in order to reduce their environmental footprint as well as their operational costs. The integration of such technologies in their production process reduces the consumption of natural resources (primary and secondary raw materials, conventional fuels, electricity). Thus, the companies promoting low carbon innovative technologies will benefit from the need of other companies to become more environmentally friendly. For example, the telecommunications sector promotes applications on both mobile and non-mobile phones that allow for the reduction of transportation costs (e.g. working by distance).

The timely detection and exploitation of such opportunities by Greek businesses could become their way out from the current economic crisis.