



# Life Cycle perspective as a chance to make the most out of EMAS

Or

Environmental Statement (EMAS) vs Environmental Product Declaration (EPD)

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# WHAT IS ERVET?

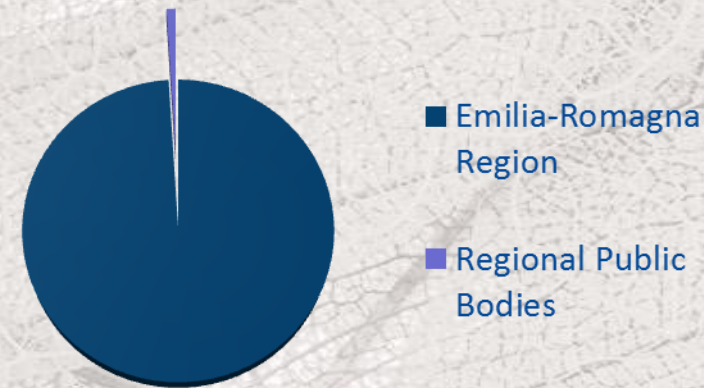
❑ ERVET is the "in house" company of Emilia-Romagna Region acting as a regional development agency, providing support for the territorial development policies of the Regional Administration

❑ ERVET is subject to a “control which is similar to that which the P.A. exercises over its own departments”, shareholders are completely public (Teckal Sentence, C- 26/03). It has to operate exclusively with public holders, it can't own shares of other companies or entities (dl 233/2006)

## EMILIA-ROMAGNA ECONOMIC VALORIZATION OF THE TERRITORY

CAPITAL STOCK	€ 8,551,807
REVENUES 2016	€ 9,220,281
EMPLOYEES	83

### ERVET shareholders





# ERVET MISSION

Our mission is focused on investment promotion, cooperation among regions, provinces and municipalities, and, together with economic and social players, on the realisation of coordinated action to promote the sustainable development and environmental qualification of the region (Reg. Law 25/1993 and subsequent amendments).

Knowledge  
Provider

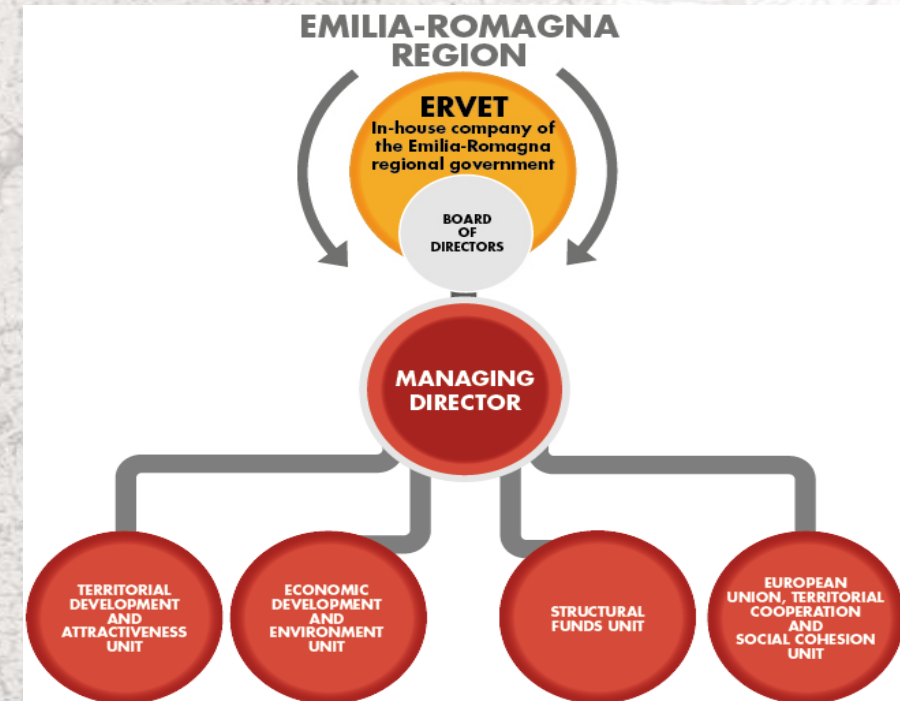
## ERVET SpA operates as/in:

- POLICY PLANNING
- POLICY IMPLEMENTATION
- SYSTEM INTEGRATION
- NETWORKING
- POLICY EVALUATION

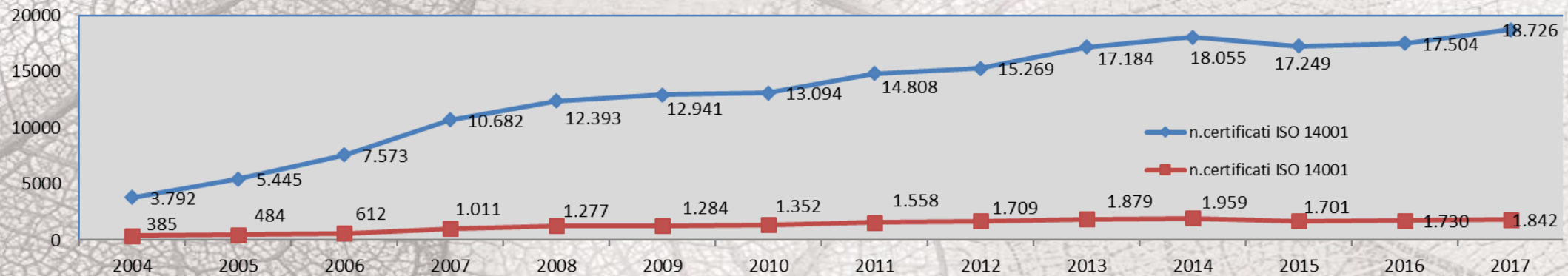
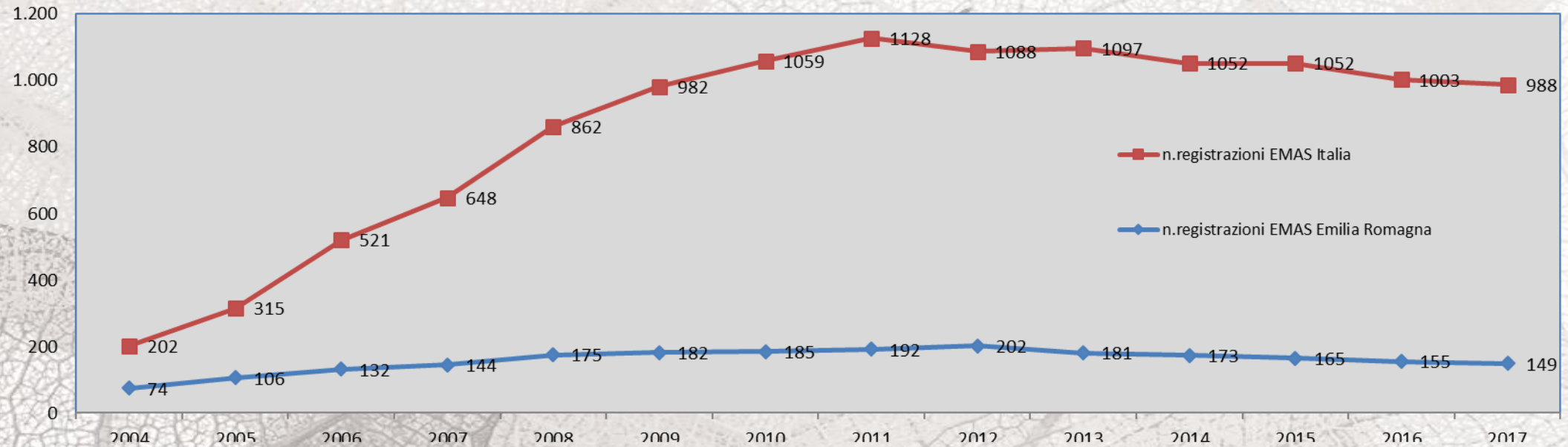
Organization

## MAIN UNITS:

- Territorial Development and Attractiveness
- Economic Development and Environment
- European Union, Territorial Cooperation and Social Cohesion
- Structural Funds



# EMAS and ISO 14001 trend (Italy and Region)





# Summary

- 1 - New ISO standard and changing on EMAS
  - Transition period
  - EMAS new annex
  - Reference Documents
- 2 - Two words on EPD
- 3 - Tools differences: three different perspectives
  - On Public Tender
  - On Marketplace
  - For Stakeholders and Community
- 4 - Conclusion



# 1 - New ISO14001: Transition period

## Timeline:

- 15 September 2015: the new ISO 14001 was officially published;
- 28 August 2017: the European Commission has revised Annexes I-III of the EMAS regulation to integrate the changes;
- 14 September 2018: EMAS registered organisations have been granted a transition period to comply with the new requirements.



# 1 - New ISO14001: EMAS Annex I

Revised Annex I of the EMAS regulation now requires to:

- Identify the “external and internal issues” that can positively or negatively affect its environmental management system
- Determine the needs and expectations of interested parties
- **Assess the significance of its environmental impacts with a life cycle perspective**
- Identify risks and opportunities associated with its environmental management system.



# 1- New ISO14001: EMAS ANNEX I

the organization shall determine the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective.[...]

The organisation has to **integrate a life cycle perspective** more strongly during the determination of environmental aspects and while defining processes and procedures with regard to its activities, products and services. This may include stages such as:

- raw material acquisition,
- design,
- production,
- transportation/delivery,
- use,
- end-of-life treatment and final disposal

However, **no life-cycle analysis (LCA) needs to be carried out**. This new requirement thus only **marginally** exceeds the EMAS Regulation's current requirements.



# 1 - New ISO14001: Reference Documents

Tips from a reference document:

“best environmental management practice is to assess the environmental impact of products and operations **using life-cycle assessment (LCA) tools to identify priority areas for action, or ‘hotspots’**, and define a strategy for reducing the environmental impacts.

When undertaking an environmental sustainability assessment, food and beverage manufacturers can face a number of challenges which include the complexity of the product and the accessibility of information; **it can be expensive and time-consuming to undertake LCAs, and certain environmental impacts may also be beyond the control of the manufacturer** and thus very difficult to act upon, even if they can be quantified.

This practice is applicable to SMEs in the food and beverage manufacturing sector, **given that they can use simplified tools when their capabilities or resources do not permit full LCAs”**



# 1- New ISO standard and changing on EMAS

So it seems that bigger organizations will find EMAS Life perspective more demanding !

No mandatory rules means:

- Certification Bodies could act more subjectively analyzing the compliance of the life perspective approach;
- A “light” life perspective approach can introduce some performance indicators based on products. In this case could be useful the sectoral reference documents (SRDs are not yet available for all sectors). Moreover take into account that implementing the best environmental management practices listed in the SRDs or meeting the identified benchmarks of excellence is not mandatory for EMAS registered organisations. However, during its environmental audit the organisation shall provide evidence on how it used the SRDs when developing and implementing its environmental management system;
- Companies with a strong brand could use information of their products in the Environmental Statement to strengthen their stakeholder strategy.



## 2 - Two words on EPD system

The International EPD® System support organisations to communicate the environmental performance of their products (goods and services) in a credible and understandable way by developing and spread environmental declarations according to ISO 14025 and supplementary information on particular environmental issues, such as the carbon footprint

The International EPD® System offers a programme for organisations to disseminate **verified product related information** for a number of market applications, **including business-to-business and business-to-consumer**.

The scope of an EPD can be both for the product of a single company or as the average product of companies in a specific sector and geographical area: a “Sector EPD”.

The International environmental declarations EPD® offer general accepted programme requirements building on **common and recognised life cycle assessment (LCA) calculation rules for as many product categories as possible** as well as to provide a uniform reporting format.



## 2 - Two words on EPD system

Environmental declaration allows a description of the company and the brand.



### Summary

#### THE BARILLA GROUP



Born in Parma in 1877 as a bread and pasta shop, Barilla is today among the top Italian food groups, a world leader in the pasta and pasta sauce businesses in continental Europe, bakery products in Italy, and the crispbread business in Scandinavia. The group has 29 production plants (14 in Italy and 15 abroad) and employs a workforce of over 8.000 people.

#### THE PAN DI STELLE BRAND



Pan di Stelle was created in 1983 as one of the Mulino Bianco biscuit for breakfast. In 2007, with the launch of snacks and cake, Pan di Stelle became an independent brand, becoming a true "love mark". It completes the Mulino Bianco offer with a range of indulgent products with cocoa/chocolate and it is characterised by a visual identity and a particularly distinctive communication area (dreams in a starry night).

#### THE PRODUCT



The product included in the analysis is Pan di Stelle Mooncake, produced in the Italian plant of Cremona. Pan di Stelle Mooncake is sold in recyclable packaging of 210 grams and it is ready for consumption.

#### DECLARED UNIT

Data are referred to 1 kg of product and related packaging of 210 g, made by flexible plastic film and plastic foam for monopack and external paperboard package.



For additional information regarding the activities related to the EPDs of the Barilla group, contact Laura Marchelli - [laura.marchelli@barilla.com](mailto:laura.marchelli@barilla.com)

#### ENVIRONMENTAL IMPACT

Global Warming Potential		3,14
Global Warming Potential - biogenic	kg CO <sub>2</sub> eq.	-0.55
Acidification Potential	g SO <sub>2</sub> eq.	23.97
Eutrophication Potential	g PO <sub>4</sub> <sup>3-</sup> eq.	12.27
Ozone - Creating Potential	g C <sub>2</sub> H <sub>4</sub> eq.	0.99

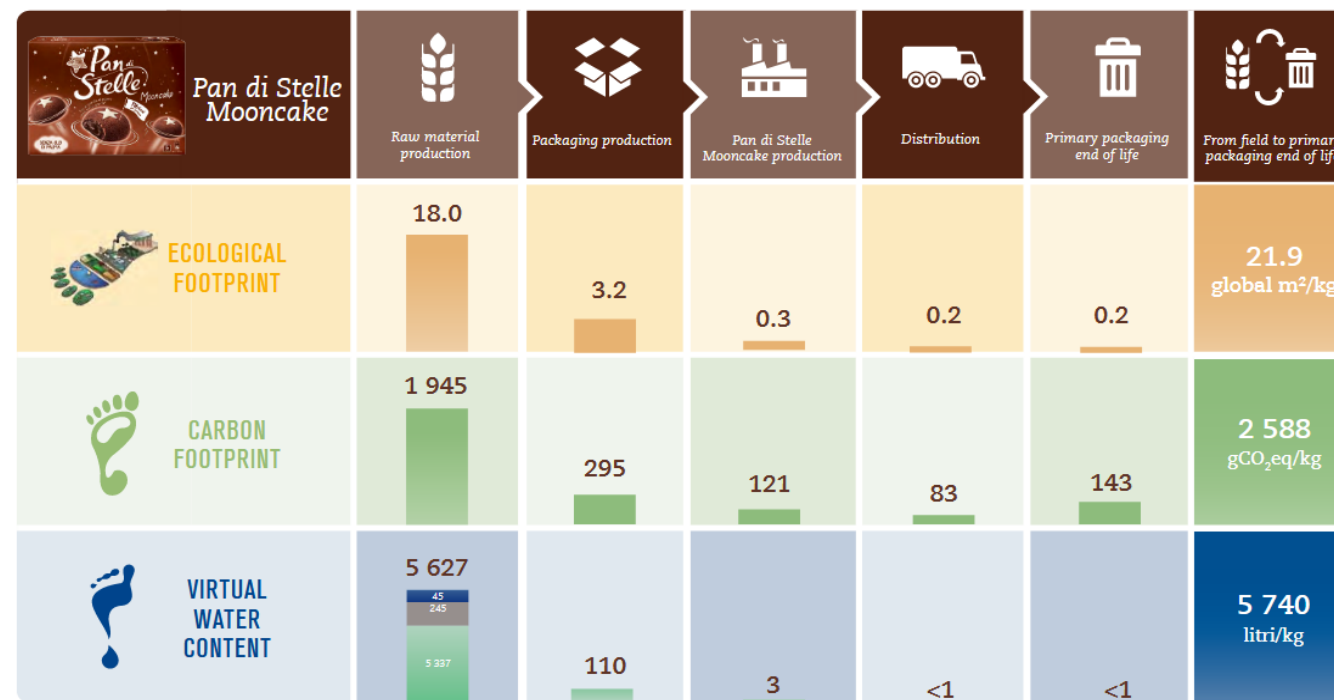


## 2 -Two words on EPD system

Product Environmental Performance is standardized in specific product category rules but is not so easy to read for a customer (EPD was born as a BtoB label).



### PRODUCT ENVIRONMENTAL PERFORMANCE



The Carbon Footprint is the sum of fossil and biogenic contribution to Global Warming Potential, excluding emissions and removals due to the product and its ingredients.

16 EPD Mooncake Pan di Stelle – rev 2, 13/02/2017

Barilla  
The Italian Company Since 1877



### 3 - Tools differences: Public Tender

New Italian Code of Public Contracts of works, services, supplies (Legislative Decree 50/2016): important changes of public purchases in Italy.

- technical specifications;
- conditions of performance of the contract;
- environmental protection obligations;
- technical and professional ability;
- Environmental management standards;
- contract award criteria.



### 3 - Tools differences: Public Tender

#### Most economically advantageous tender....

Art. 30 ..into public tenders the economic principle can be subordinated to the criteria of social, health and environment exigences...and to promote sustainable development

Art. 34 ..contracting authorities contribute to achieve environment objectives.. through the insert technical criteria and contract terms (in accordance with minimum environmental criteria in public tenders

#### And in particular for Certification.....

Art. 69 ....public administration can require a specific label (ecolabel...) as mean of evidence to demonstrate a specific environment qualities of goods

Art. 87 ... public administration can require of providing environment management system certification (ISO14001 or EMAS) to demonstrate technical and professional ability in performing the contract

Art. 93 ...the amount of guarantee is reduced of 30% in favour of economic operators with a environment management system registration (EMAS)..and other quality system registration

Art. 95 ... contracting authorities award tenders with assessment of quality/price (life cycle cost)



### 3 - Tools differences: Public Tender

Row Labels	1. Apparecchiature elettriche ed elettroniche per ufficio	10. Pulizia e prodotti per l'igiene	11. Gestione dei rifiuti urbani	12. Ristorazione collettiva e derrate alimentari	13. Serramenti esterni	14. Servizi energetici per gli edifici (illuminazione, climatizzazione)	15. Forniture di prodotti tessili	16. Veicoli	17. Verde pubblico	18. Pulizie Ospedaliere	2. Arredi per interni	3. Arredo Urbano	5. Ausili per l'incontinenza	6. Carta per copia e copia grafica	7. Cartucce per stampanti	8. Edilizia	9. Illuminazione pubblica	Grand Total
<b>Grand Total</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>18</b>	<b>6</b>	<b>5</b>	<b>38</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>16</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>15</b>	<b>8</b>	<b>166</b>
ISO 14021	1	1		1	1					1	1	2	1	1	1	1	1	13
EU Ecolabel	1	1		1			1	1		1	1	1		1		1		10
ISO 14025	1	1		1						1	1	1			1	1		8
EMAS		1	1	1		1				1	1					1		7
ISO 14001		1	1	1		1				1	1					1		7
ISO 14024	1	1		1						1			1		1	1		7
PEFC™					1						1		1	1		1		5
EPD				1								1	1		1			4
FSC®					1						1	1		1		1		4
FSC® Recycled											1	1		1		1		4
Nordic Ecolabel	1									1			1		1			4
PEFC® Recycled											1	1		1		1		4
Plastica Seconda Vita				1							1	1				1		4
Remade in Italy®							1				1	1				1		4
Der Blaue Engel	1													1	1			3



# 3 - Tools differences: Marketplace

EPD is a product label....EMAS Regulation states:

## HOW NOT TO USE THE EMAS LOGO

On products or packaging, to avoid confusion with product labels;

With comparative claims concerning other activities and services.

The logo must not be used in ways that may cause confusion with other labels for products or services.



# 3 - Tools differences: Stakeholders and Community

Different focus!

**EPD** and product label

- Customers
- Chain Supply

**EMAS** and ISO14001 standard

- Local community (site specific)
- Public Administration



### 3 - Tools differences: Stakeholders and Community

Good internal and external two-way communication is essential to implement an EMAS-registered environmental management system successfully.

The organisation needs to recognise the need to communicate **with stakeholders on environmental issues and the value of doing so**. It is obliged to make the environmental statement public, and it will need to identify what will be communicated and to whom. It will need to monitor the results of its communication and to determine whether it has been effective. Internal communication should flow in both directions (top down and bottom up). This can be done by using intranet, brochures, internal publications, newsletters, suggestion boxes, meetings, bulletin boards, etc.

Examples of external communication are the EMAS environmental statement, internet, action days, press releases, brochures and use of the EMAS logo if possible and allowed



## 4 - Conclusion

**IS Life Cycle perspective a chance to make the most out of EMAS ?**

My personal answer is: Not completely

- The bigger is the organisation, the more it is interested in reputation and brands. Reputation is both on a territorial and on a market scale so EMAS and EPD (product label) could bring advantages if developed together; Environmental statement can strengthen the green company vision.
- ....For a smaller organization cost benefit analysis needs to be made more carefully. EMAS and EPD (product label) could bring different advantages. First questions for a correct choice is: why does my company have to certificate? Supply chain, GPP, Local Community...
- At last, a full LCA approach for all products can be very expensive like an EMAS registration for all production sites. The economic part has to be carefully considered for an integrated approach;