



## Good Practice selection in Nouvelle Aquitaine, France

---

Through this document, you will find all the 8 good practices who will be presented in September 22, 23 for Nouvelle Aquitaine region. For each GP, you will find information under the framework of a form, proposed by our Italian lead partnership divided in two parts: (1) data about the GP project (context, content and process of GP) and (2) data about the policies behind each GP.

### Index

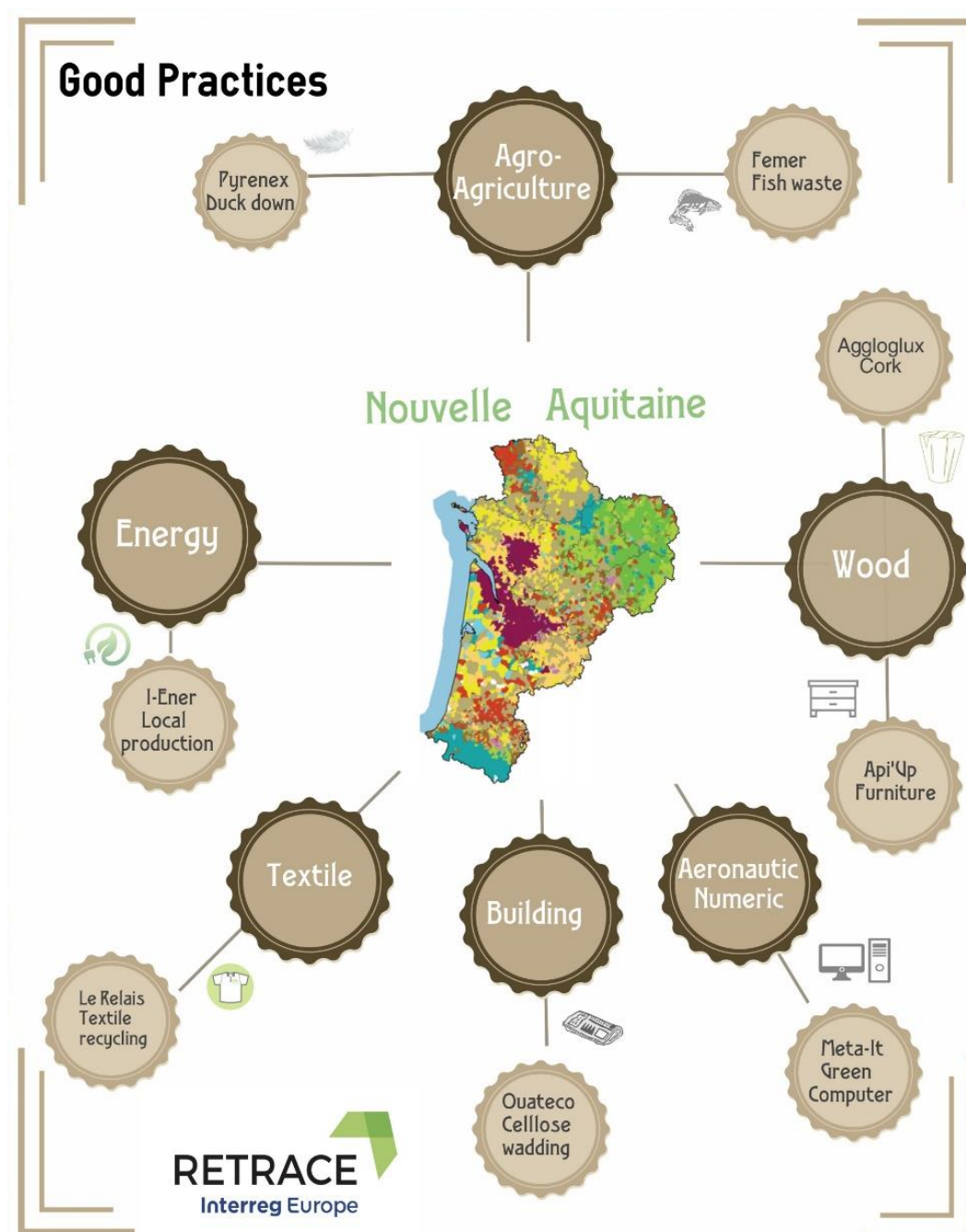
<b>Good Practices selection in Nouvelle Aquitaine, France</b> .....	1
GP 1: Pyrenex, collects and transforms local duck leather into down for textile and bedding products .....	3
GP 2: Femer, collects and transforms fish skin for leather based products .....	6
GP 3: Agglolux, manufactures cork based products from local and/or recycled corks .....	9
GP 4: Api'Up transform sold furnitures into new high quality design products .....	13
GP 5: Meta-IT designs a eco-efficient computer .....	18
GP 6: Ouateco produces cellulose wadding from local newspapers .....	21
GP 7: Le Relais collects, sorts, transforms and sells textile products .....	25
GP 8: I-ener produces local energy thanks to citizen participation .....	28

### Contacts :

Marion REAL – [m.real@estia.fr](mailto:m.real@estia.fr),  
Mikele Larronde – [m.larronde@estia.fr](mailto:m.larronde@estia.fr)  
Iban Lizarralde – [i.lizarralde@estia.fr](mailto:i.lizarralde@estia.fr)  
Benjamin Tyl – [benjamin.tyl@apesa.fr](mailto:benjamin.tyl@apesa.fr)  
Cyril Baldacchino : [cyril.baldacchino@apesa.fr](mailto:cyril.baldacchino@apesa.fr)



Here, you can find a visual summary of how GP are connected to Nouvelle Aquitaine and economic sectors.



Links toward other mode of visualization :

<http://easel.ly/infographic/63n27c>

<https://kumu.io/missreal/retrace#gp/gp-22-23-of-september/good-practices>



GP 1: Pyrenex, collects and transforms local duck leather into down for textile and bedding products

---

AGRICULTURE WASTE

**Organization/Company name:**  
PYRENEX

**Title of Good Practice**

Development of an historical activity to a fashion reference

- 1.. **Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**  
The whole story of Pyrenex is an example of circular economy good practice for more than 150 years.
2. **What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

*About the context of the company :*

The Crabos Company is firmly anchored in the heart of the Landes region, the historic heartland of French goose and duck breeding, a natural activity for the last 200 years in this area near the Pyrenees mountains.

The family saga begins in 1859 with the great-grandfather, Abel Crabos, collecting feathers from markets and farms. He was joined in the family business by his son, René, captain of the French rugby team after the Great War and President of the French Rugby Federation (FFR) in the 60s. He bought a sorting machine that was modern at the time and specialized in the raw material itself. The exceptional quality of the goose and duck down from the Pyrenees earned it a reputation on the most demanding markets: Germany, Switzerland, Austria and Scandinavia, then the United States and Japan. Most of all, René Crabos established the values of commitment, confidence and solidarity that forged the particular character of the company. And in a spirit of generosity Marie Crabos, René's wife, created the first down jackets to protect prisoners from the cold during World War II.

*About feather and down :*

Feathers and down are the natural protection of geese and ducks. They have exceptionally high insulating properties for their weight. Human beings have long known that this natural material combines comfort and longevity, making it ideal for storing warmth and providing protection from the cold.

The vast majority of fillings are a mixture of feathers and down in variable proportions. Small feathers have a characteristic curve that lends firmness and bounce to products, both essential for rest and repose. Mixed with down, small feathers give added shape and form to comforters and pillows. Down, being much more light and flexible, provides heat and insulation. It consists of a core, around which little fibers develop. This three-dimensional geometry enables it to trap air which, when heated by the body temperature, provides natural and thermo-regulated heat. It is a precious material, representing only 10% of the feathers, and is reserved for top-of-the-range products. With its perfect know-how in blending feathers and down,

3. **What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**  
The objective of this GP is to show how an historical activity which come from the use of an output as an input can be transformed to an industrial activity and a fashion reference.
4. **What is the content of the Good Practice? Describe the concrete activities implemented.**  
Pyrenex is the only European company that integrates all production stages for down articles, a know-how that guarantees its perfect mastery of the process and the exceptional quality of the products. It exports to Korea, Taiwan, China and the USA.

The process of Pyrenex consist in three activities:



- Collection of feather within agro-industrial partners (after classical breeding, feeding, slaughtering of ducks). Pyrenex works exclusively with the best goose and duck breeders in the Aquitaine and Pyrenees regions.
- Treatment of feathers which is to save, sort according to different qualities of feathers and down, wash , dry and sterilize them.
- One part of the feathers are sold as raw material to different producers of textile & housing products
- The other part goes to the manufacture and selling of clothes, quilts and pillows are realized in different places: Design and prototype in Saint-Sever ( Lands ), production in Tunisia, Chine and East Europe country and selling all around the world.

**5. What is the implementation process? Describe the process followed for practical implementation.**

- Since the late nineteenth century, several houses in the Southwest of France were collecting the leather in regional slaughterhouses for the ship, after appropriate treatment, to various European countries (Germany, Switzerland, ...), and in North America.
- To cope with the growing competition in 1968, the CRABOS companies DARROZES CHEVALLIER and FOURMENT regrouped them to give birth to the PYRENEX society.
- In 1970, the company diversified its business by creating the pillow clothing sector, quilts, sleeping bags and jackets.
- Pyrenex has evolved over the years: Modernization and Automation of production means, partial relocation of the textile industry due to a severe crisis in the textile sector, positioning quality products and more recently adopted a position important on the fashion market and luxury.
- To maintain its presence in France and stand out from the rising competition in jackets, Pyrenex diversifying its distribution channels by establishing its own brand in ephemeral shops and create pop Store.
- Since 2008, several projects were implemented by Pyrenex to improve their environment impact: Certification Iso 14 001, winner of an eco-designed product for industrial design Aquitain trophée, creation of a label named ELDEVEN, labellisation “Oekotex, Quickdry, Teflon and Microstop”, Life-Cycle Assessment on pillows, conception of an internal eco-design tool, participation to working group about environmental labeling, trainings in eco-design and realization of eco-innovation approaches.
- An hard work was done to optimize the industrial process and more specifically on the waste water treatment plant

The results realized by Pyrenex:

- Water consumption was divided by 3 in 10 years.
- Since 2008, gas consumption was reduced by 30%, electricity consumption by 20% and waste recovery was improved by 25%.
- The use of natural treatments, bedding articles are certified Oekotex and some tissues are from organic farming.
- The packaging is manufactured from recycled cardboard.
- New projects are emerging like the integration of local hemp and wax in their product.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

The heart of the Pyrenex activity is related to the CE by valorizing an output of the agricultural industry. Feathers and down are collected at the end of the transformation process to be valorized in the Pyrenex production plant.

**7. To which sectors does this Good Practice refer?**

Agricultural and textile/housing sector

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**



The beneficiaries can be mainly the consumer for the feather and down finished products. A part of the down and feather production is also sold to other manufacturers of textile and housing goods.

In 1992 Pyrenex was the official supplier of down for the opening ceremony of the Olympic Games at Albertville – images that went round the world.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

The main difficulties encountered are the risk of sourcing which can be affected by influenza for example, the social acceptability of animal based products by consumers

**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

A lot of documents are in the company, concerning the history of his activity. The transferability of the GP is hard because of the ancestral know-how in the Pyrenex factory. Ancestral techniques have thus been preserved. The industrial process, in particular the water treatment plant technology is not transferable because it's part of the competitive advantage of Pyrenex.

The environmental management can be easily transferrable as well as the way the mode of collection with agro-industrials and farmers.

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

The public actors in the Aquitaine region (Region, department, CCI...) and mainly the Aquitaine region have worked on the development of Pyrenex throughout this years. They offer technical & economic opportunities to help the company.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

It exists a win-win partnership between regional agencies and Pyrenex. The involvement of Pyrenex in active groups (as well national as regional) around the feather industry contribute to their success. In exchange, public actors participate to the diffusion and valorization of Pyrenex works.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

Several aspects were and are still supported. We can say cooperation between actors, eco design strategies, employment....

**14. Through which supports? Non-repayable financing , subsidized financing, support in terms of competences, etc.**

Financing in the major part (subventions)



## GP 2: Femer, collects and transforms fish skin for leather based products

AGRICULTURE WASTE

**Company ;**  
SAS Peau Marine

**Title of Good Practice**  
FEMER

**1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

The project starts 4 years ago. It concerns the valorisation of Aquitaine fish wastes by natural fish skin tanning. It benefits to both fishmongers (small & supermarkets) and leather stakeholders (designers, producers...). The company is composed by 3 associate people. 80 customer companies are already involved with FEMER and 10 fish shops. Fish leather can be diffused all over the world and a tanning know how can be transferred.

**2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

Actually, 2 000 tons of fish skins ends in garbages of supermarkets & fish shops. Some are transformed as cat feeding. Most of them do not find any uses & wander in nature, with unpleasant odors, diffusing humidity in waste collection. Moreover, there is a loss of know-how in leather industry in Europe: 1/ It exists a diversity of skins still unexploited. 2/ Most of fish leather come from emergent countries (Bresil, Thailand, Bresilien, Philipinnes). Finally, it is necessary to fight against some non-ethical leather industry practices (example : crocodile treatment...)

**3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

The objective of FEMER is to produce and sell fish leather from fish waste industry. The target group is composed by leather producers & customers who are looking for unique, crafty, varied, eco-designed & local leather products (bags, belts, shoes...)

**4. What is the content of the Good Practice? Describe the concrete activities implemented.**

The project follows an entrepreneurial process :

- \*Idea emergence in a mother/daughter relationship,
- \*Association development for R&D (analysis of the potential quantity of fish skin wastes in Aquitaine & opportunity analysis, tanning process development),
- \*Training with ETICOOP, an innovative incubator model,
- \* Creation of the company SAS Peau Marine with 3 associates,
- \* Realisation of first fish skins (without dyeing),
- \* Valorisation in Trophées & financial aids,
- \* Training & process improvement,
- \* Partnership with Daguet, a leather manufacturer to create first collections of bags from the first dyed fishskin leather.

**5. What is the implementation process? Describe the process followed for practical implementation.**

The process is composed by 7 steps :

- Collect of fish skins at fishshops & transports,
- Cleaning treatment (suppression of scales and fleshies),
- Tanning with mimosa plants consisting in a bath of four days,



- Skin Drying,
- Softening,
- Dyeing with acrylic & direct patina applications.

The skins are sold to manufacturers or used for co-produced collection.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

Several points are related to CE:

- Collect of fish wastes.
- The tanning process is thought to use 0 chemicals, and minimise wastefulness .
- Philosophy & visions >> team is clearly motivated to act for a sustainable territory.

**7. To which sectors does this Good Practice refer?**

Leather & textile industry, Agriculture

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

- Several prizes allow the company to be recognized & to obtain financial aids : APEC man/woman equality trophy, price " company & environment ministry prizes for Circular economy start-ups, Deba challenge, national Audace price....

-80 companies & 10 fishshops are working with the company which is at a launching stage.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

The company needs more structuration to be adapted to the market demand. They need 150 000 euros to reinforce the equipments, and financing two employees.

The project is engaged in a new incubator specialized in leather, offering interesting supports (like free participations in training, seminars or business meeting).

They also are curious of new ecological drying processes.

Finally, a parallel project is emerging to valorise more fish skins. The project holder is thinking about building an industrial process to transform fish skins into boat parket.

Concerning the support, project holder highlights that policies could support the local products by offering tax reduction for dealing with french providers.

In term of global support, new models of shared factories could be thought in line with company's means & needs. A free model need to be discussed.

Innovation intermediaries need to encourage project holders and act as accelerators, giving tools to face & adapt the market quickly

**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

FEMER is present in social networks (facebook, twitter...) and reknown in Aquitaine & France. The idea can be transferred but the precise tanning process is not diffusable.

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**





The project promotes an environmental & social innovation. It offers new ways for fish shops to collaborate & valorize their products. And the tanning process is thought and gradually improve to be more and more ecological.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

Two points need to be highlighted :

1/ The tanning process integrates a special, non polluting mimosa plant.

2/ The company received a support focus on the training of project holders which allowed to make the project concrete contrary to other tested forms of incubations.( too expensive without a complete support)

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

The project supports process innovation, reducing environmental impacts and cooperation. At this stage, few concrete policies are available to help the project development : risk capital business angels, FEAMP funds...

**14. Through which supports? Non-repayable financing, subsidized financing, support in terms of competences, etc.**

Supports : ETICOOP, ATIS and DARWIN incubators, Aquitaine active, Maison du savoir-faire.





## GP 3: Agglolux, manufactures cork based products from local and/or recycled corks

---

WOOD WASTE

**Organization/Company name:**

Agglolux

**Title of Good Practice**

Agglolux

- 1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

Agglolux is a family company who mass-produces cork products since 1929. It now involves 10 employees, and transforms 150 tons of cork every year. Decoration, industry, insulation products are designed and sold to customers. Collaboration with designers and distributors permits to diversify the quality and quantity of sold products, while cork manufacturers and public institutions tend to revalorize cork oak by planting and endeavour local cork collection in both public & private fields.

- 2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

During centuries, cork production was an important activity in the Landes and Lot-et-Garonne departments. Since the nineteenth century, most of cork oaks disappeared (cold weather, reforestation with maritime pine). In 1950, cork industrials gave up cork oak collection because of a high competence with Portugal & Spain industry. Importation was preferred until 2000. Since 2000, efforts have been made to reproduce and collect cork in a local area. An association was created named Le liege Gascon to promote the development of this local activity.

Moreover, the Aquitaine region and France in general are known for its wine production and consumption. Cork is key product used to close wine bottles. Millions of corks are collected each year by caritative organisations. Recyc'liege was created to recycle used corks and transform it in new products.

Agglolux is a key stakeholder initiating with other partners Le Liege Gascon and Recyc'liege.

While capacity of treatment and local quantities were disminushing, the cork demand is still growing. New tendancies around cork appears : shoes, bags....

- 3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

The objective of the GP is to find new solutions to maintain the diversity of the Landes forest, to create local value around the cork oak and to revalue industrial waste of this industry.

Thus, the needs concerns the forest maintenance, the transformation of cork oak barks into useful and desired products, and to create a stable activity around the reuse of cork coming from wine bottles.

The target groups are:

- Cork product customers
- Charities and citizens for collecting cork from wine bottles
- Private owners for maintaining their trees and collaborating with industrial partners.



- Other industrials for optimizing the transformation of cork

**4. What is the content of the Good Practice? Describe the concrete activities implemented.**

Agglolux is a cork manufacturer with diverse cork products :

- Decoration products like seat, tray, furnitures, babyfoot balls
- Industrial products (seal, cork stab, cones...)
- Habitation (cork floor, expanded and concentrated cork granules...)

While classic product are destined to medium & high of the range, recycled cork products is accessible for low prices.

The classic process consists in several actions:

- Collection of gross cork and recycled cork, collected separately.
- Cleaning and mashing in different size pieces
- Brewing with special mix of handmade glues
- Balering and rolling round
- Completion (cutting, stiching, engraving, superposition)

Other type of activities: co-design with designers, architects, partnerships with distributors, trainings, exhibitions...

**5. What is the implementation process? Describe the process followed for practical implementation.**

- Birth of the company in 1929,
- Innovation and development of manufacturing capacity, (new adhesives based on animal bones, adapted machines and processes)
- Collection of corks,
- Product development & diversification,
- Creation of Le liege Gascon in 2000,
  - \*Study of opportunity (Marensin and Neracais forest analysis),
- Creation of Recycliege in 2004,
- Diversification,
- Development of a certification & training for cork oak skinning,
- Development of new economic models between manufacturer and private cork oak owner,
- First production of Gascon cork for wine bottle in 2016/2017.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

Since 20 years, Agglolux and their partners are realizing efforts to use and recycle an historical resource present in the territory : the cork. In the company, each offcut is introduced again in the process so as to transform it in a final product.

The creation of Le liege Gascon in 2000 aims to

- \* Crop and create an economic valorisation of local cork
- \* Study the interest of Cork in the phytosanitary and DFCI frames.
- \* Act as a biodiversity restoration and play an ecological & cultural role for forest ecosystem.

As Cave brothers said : "circular economy may emerge now, but we are working on since decades..."



**7. To which sectors does this Good Practice refer?**

Forest, furniture

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

Each year, 90 tons of corks are collected and treated by Recycliege.  
10 tons is taking back from cork oaks by Le Liege Gascon.  
Next year, the first panel of Gascon cork will be produced.  
New models are developped for private citizens, cork oak owners.  
A training is proposed to learn how to “démascler” the tree (remove the bark of cork oak).

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

There is a strong International competence in Europe.  
Some aquitain companies do not buy local products and deals with competence (Non-awareness, preferences...)  
Competent company are also collecting French used corks.

The high cork oak growing time involve long term vision and cannot be reapped before 10 years.

Oaks are owned by private people. (Only 10% of fields is public) Thus a new model was found to deal with a private owners.

Finally, the company needs to invest in a new production line so as to respond to new markets. Aquitaine Region will finance three new activities for the next 3 years around technical sport products and textile productions.

**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

Even if the process is secret, the case may be transferred. You can find information:  
<http://www.agglolux-cbl.com/>  
<http://www.lieliegegascon.org/Travail.php>  
<http://www.recycliegefrance.org/index.php>

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

Technical and environmental innovation.

-----  
The two projects (recycliege and le liege gascon) are supported by different organisation.

Recycliege is directly linked with a network of charities who collects corks from citizens or professionals.

Le Liege Gascon is supported by the region, the department council of Landes, ONF (national forest organisms), the urban center MACS, CRPF, DFCI, Planfor, Agricultures & territoires ... They campaign for a new stability in the forest biodiversity and for the re-introduction of cork oak in the Landes.

The region also supports innovation process by financing new production lines as precised in question 9.



Collaboration with Xilofutur a competitiveness cluster in cultivated forest products and materials aims at improving the competitiveness of the company.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

The originality of the Liege Gascon and Recyc'Liège lies on the idea of creating new associations to better create value and protect natural elements with the presence of public stakeholders and industrials since the beginning of the project.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

Cooperation, process & technical innovation & environmental impacts (opportunity analysis)

**14. Through which supports? Non-repayable financing, subsidized financing, support in terms of competences, etc.**

Non-repayable financing ( subvention) // Support for networking & innovation.



## GP 4: Api'Up transform sold furnitures into new high quality design products

---

WOOD AND TEXTILE WASTE

**Organization/Company name:**

Api'Up

**Contact:**

Valérie Fernani

**Title of Good Practice**

Du déchet au design

**1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

Api'up creates the social workshop " du déchet au design" in 2014 at Cap Breton, in the Landes department., whose activity consists in the manufacture of eco-designed furnitures from waste collected on the territory.

API'UP is dedicated to circular economy, ecodesign, sustainable design, industrial ecology - It experiments innovation on materials and studies of new eco-friendly activities

The ecosystem of API'UP relies on the development of partnership relations with many local actors: institutions and communities, companies, waste operators, etc.

In particular, the involved organisations are :

- Collectivities: European Union, France, Nouvelle Aquitaine Region, Landes department, Marenne La Pédulière urban center. They financially support the project.
- Regional association: Aquitaine Active, Le Garie. They propose technical support.
- Local reused and recycling centers: e.g. Emmaus
- La Camif, an online site selling products coming from social economy, to promote the products of API'UP

**2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

Waste are more important every years. Recycling centers and dump sites are overwhelmed. It exists an important quantity of materials which are still not resold in recycling centers & charities.

Besides, the industry of textile and furnitures are guided by fashion. Its provokes the acceleration the obsolescence of their production and a growing consumption. New modes of production & consumption need to be implemented. Upcycling (process of transforming the recovered materials or products become no use in new objects better or high aesthetic demands) is a sustainable business model for fashion and decoration industries.

Finally, the project is involved in social inclusion & advocates for the rehabilitation and apprenticeship of useful and traditional know-how. (carpentry, sewing...)

**3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

Created in January 2014 by the Association API'UP, the workshop "from WASTE to DESIGN" produces series of new and designed furnitures from wastes and abandoned materials which is collected in the territory thanks to several economic actors.

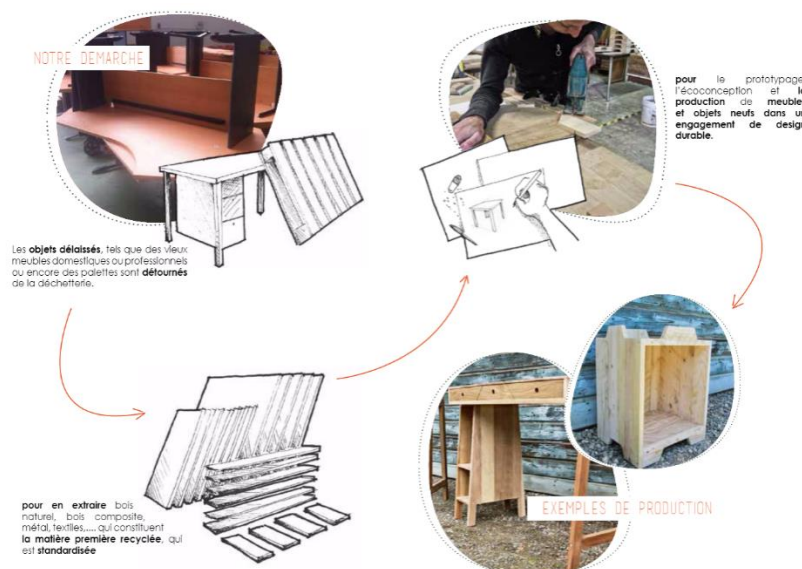
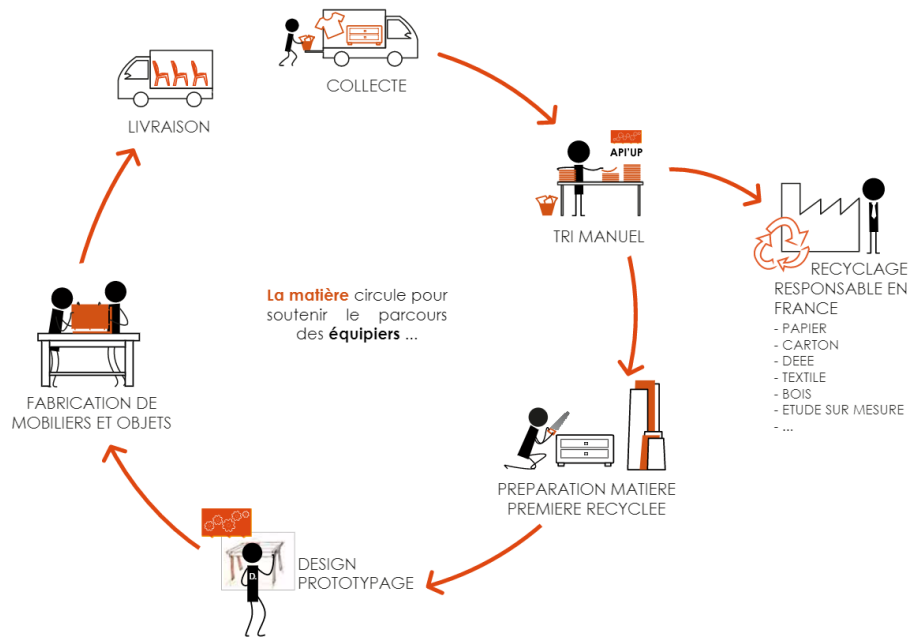
The workshop combines recycling and eco-friendly design, eco-designed industrial process, transformation of uses in new items/products with higher added value. One word can synthesize the approach : upcycling.

The association is part of the social economy and employs more than 2/3 of its workforce in integration through



economic activity.

4. What is the content of the Good Practice? Describe the concrete activities implemented.



The workshop is based on two synergetic activities :

1- Limited serie production of furniture from furniture, textile and leather wastes

Collecting,



Sorting, Standardisation, preparation  
Prototyping and design  
Production  
Selling and delivery

2-Responsible recycling :  
Collecting and sensitization in companies  
Sorting and deposit in adapted recycling places

Participation in research projects to find new solutions to better upcycle different type of materials. (for instance, recycling of chipboard wood)

**5. What is the implementation process? Describe the process followed for practical implementation.**

2012

Birth of the project after the desire to create an activity that falls within the circular economy and based on technical and technological innovation.

- South Aquitaine regional authority consultation to identify specific local needs and collect waste stream processing.

- Discovery of Upcycling, which consists in recycling the materials by creating a higher added value object.

Mobilization of 8 people (designers, professional integration and sustainable development) to define the bases of the project in a semi-industrial scale.

Sept. 2012 - Dec. 2012

Internal opportunity study and Alter-Conseil (consulting structure) for 6 months.

January-June 2013: feasibility study.

October 2013: Obtention of the approval for social inclusion project issued by the Committee CDIAE (Departmental Council of Integration through Economic Activity).

January 2014: operational launch of the workshop "Du dechet au design."

2014-2016 : stabilization and exploration of upcycling processes - Collection

June 2016 : Modular spin-off of Api'up model strategy.

September 2016 : emergence of the loop project which consists in managing a new place to give the chance for craftsmans and small companies to have a limited serie production.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

\* Any activity is created according to the principles of circular economy. It is in the DNA of the employees and of the project holder. They imagine a world where every waste can be transformed and find new uses by creating jobs.

\* API'UP integrate eco-design into their product process : design only with recyclable inputs (metal, wood, ecological glue) , use of green chemistry when necessary (>> they try to use an organic paint but without success).

\* Introduction of new materials and labeled in some local lines when recycled materials have experienced a problem.

\* Solidarity guarantees the creation of jobs that can not be relocated.

\*Technique for Upcycling: the material used is heterogeneous, a phase of standardization is essential and applied to wood, textile, leather. The process, born of extensive preliminary studies, continues to be developed





to facilitate the production.

\*Quality and environmental approach underpinned by an objective of continuous improvement.

**7. To which sectors does this Good Practice refer?**

Furniture, textile and leather, reuse

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

Qualitative benefits:

Establishment of an economic model based on two interdependent pillars that guarantee the balance between :

- The waste collection service are poorly covered by conventional collection operators;
- The eco-friendly recycling and the creation and resale of designated objects respond very precisely to the needs of diffuse and low flow treatments.

Attaching the matter of recovery of prices on the principle of solidarity with the customer: the acquisition price is shared, the annual budget is fixed and Api Up members are committed as a design office on the assessment of the value of waste. Provision of a package of communication tools to enhance the process of collecting in client company.

Quantitative benefits:

The project enabled the recruitment of 19 employees : 12 social work jobs, 1 administrative job and 6 permanent jobs.

2014: 66 tons of collected waste.

2015: 148 tons of collected waste. Half were treated towards a more environmentally responsible recycling and the other half were upcycled or reused.

In 2015, customers who bought an upcycled product were 45% of individuals and 55% of companies.

Api up currently works with about fifty companies: thirty with the collection activity and thirty with the upcycling activity (some with both activities).

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

Obstacles :

\*During the first year of business development, some difficulties were encountered because of the originality of the business model designed as a balance between the two pillars (collection and treatment / upcycling) . This comprehensive model had to be defended from partners to avoid falling into a sectoral vision of the business.

\*The structure of this type of financing policy was changed during the first year, which has weakened and delayed the activity.

Further development :

\*Now highly positioned on wood, API'UP wants to work on other deposits flow from the treatment of furniture such as textiles and leather. The prototyping phase is still ongoing for leather but the textile processing started in 2016.

\*Development of trade & commercial function with the aim of creating a job of charge of development.

\*Reflections on the conceptualization of the model for building sort of spin-offs adapted to the specificities of each territory.

\*Development of the LOOP project, a local limited serie production place composed by three activity. Therefore, instead of collecting waste to design products, the LOOP project will consists on the development of a technical center to support companies in the development of their product. This project will integrate a material resource center, a design, numerical & prototyping place and a storage place.



**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

The model is transferable : it is a confirmed strategy to export some modules of APi'Up in other territories. Information are available on the following website :

<http://apiup40.wix.com/accueil>

<http://www.recita.org/initiative/h/du-dechet-au-design.html>

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

Here you can find some acceleration factors

- Various public actors, at different level (city, departmental and regional level) support the project, above all in terms of financial support. Moreover, they give API'UP a strong legitimacy to the project.
- The partnership with the environmental organization Valdélia (eco-organism for furniture),
- The partnership with CAMIF (online site selling products from the social economy) who contacted Api'Up to develop a range of furnitures for the website,
- The global nature of our model which obliges to keep feet on the ground to develop both pillars simultaneously.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

Success factors are :

- \* the competence and determination of the project holder,
- \* the connexion and communication establishment with divers stakeholders,
- \* the project is run as a start-up for social economy.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

Cooperation & creation of jobs (social inclusion) and eco-design processes.

**14. Through which supports? Non-repayable financing , subsidized financing, support in terms of competences, etc.**

Api Up were supported by ;

European funds, state, Region of Aquitaine Limousin Poitou-Charentes, Landes department, urban centers, Aquitaine Active and banks.

Supports consist in both public and private subventions reaching 130 000€ in 3 years.



## GP 5: Meta-IT designs a eco-efficient computer from local aeronautic waste

---

AERONAUTIC AND NUMERIC

**Organization/Company name:**  
META IT

**Title of Good Practice**  
Development of a local and eco-designed computer

**1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

The good practice is about the development of a local and eco-designed computer by a SME from the French Basque country. This computer was developed in 2 years, between 2006 and 2007.

This good practice involved:

- META IT, the producer of the computer
- ADEME, as a financial support

**2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

This company is motivated by the heavy environmental impact of Information Technology (IT), throughout the life cycle, and especially in terms of energy consumption during the production phase, or waste production. In 2009, with the support of an industrial designer, the company developed a computer using a strongly eco-design strategy in order to reduce this environmental impact. Its ambition was to offer a solution to fight against the exponential increase of energy consumption due to IT (computers, servers, etc.), as well as the short lifespans of IT devices.

**3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

The objective of the GP is: (1) to integrate environmental criteria into the computer design process and (2) to reduce the consumption of energy in a building through a reduction of energy dissipation during the use stage.

The target group was the collectivities and companies. The needs META IT aims to satisfy is to propose them tailor-made IT solutions, with a long lifespan (6 years) and easy to repair.

**4. What is the content of the Good Practice? Describe the concrete activities implemented.**

The concrete result of this good practice is the development of a computer designed to be produced locally, specifically in the South West France, with a short production loop (excepting some electronic components). In particular:

- The computer is adapted for a minimal use, optimized for collectivities and companies.
- The computer has four pieces of aluminum, containing five electronic parts and connectors. Everything is assembled with screws.



- META IT remove from its computers all parts subject to mechanical wear, such as fans and mechanical disks.
- The computer is composed of long lasting components.
- The computer allows an efficient diffusion of energy through the design of frames.
- All the components in aluminum come from aeronautic aluminium wastes.

**5. What is the implementation process? Describe the process followed for practical implementation.**

The main step of a project are the following:

- The development of a first prototype in order to identify the element to be removed (such as the speaker, the CD ROM drive, etc.) as well as the main eco-design strategy to redesign the product.
- A benchmark to identify a relevant material for the system unit (in terms of resistance, heat dissipation, etc.). Therefore, it was decided to design a unit in aluminium,
- An identification of local skills and local suppliers to design the main elements of the computer,
- A benchmark to identify relevant electronic components in terms of eco-design (in Asia)

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

This GP is related to the USE of local materials and local suppliers to design the product, and therefore of a concrete territorial circular economy. Moreover, the computer adopts a repair strategy to increase its lifespan. In term of sustainable design, this Good practice relies on a radical eco-design approach to reduce the environmental impacts all along the life cycle of the computer.

**7. To which sectors does this Good Practice refer?**

This GP particularly refers to the IT sector.

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

The main result achieved by the good practice is the development of an eco-designed and local computer. During the design process, META IT removed all components with mechanical wear, reduced the number of components and integrated robust electronic components. Moreover, it developed a product which corresponds perfectly to the collectivities' real and basic uses of the product: internet, webmail, text treatment, etc. Moreover, in a context of a general relocation of production to low wage countries with lower environmental and social standards, they adopted a local development and production strategy.

The main beneficiaries were the collectivities.

The lessons learnt were the need to better communicate around the "global cost" of the product for a collectivity and to better focus on a relevant business model.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

The main difficulty was to find a sufficient local market to limit the cost of production. This product was above all designed for collectivities and companies. The support of collectivities, with a very regulated public purchasing process, was clearly weak. Therefore, a circular economy also requires public actors to introduce better, socially responsible purchasing practices in order to promote the introduction of eco-designed products into the market.



**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

It is possible to exploit the good practice through the website of the product ([alt.meta-it.fr/](http://alt.meta-it.fr/)), many videos (i.e. youtube) but also through different partners of META IT (ADEME, Université de Toulouse)  
A Cash-Investigation TV program were diffused on a national chain explaining the potentialities of the Meta-It computer compared to other classic computer.

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

The company was financially supported by local agencies during their design process. Thus, the innovation is related to an environmental and technical innovation, in particular due to a “simple” design of the product in order to be easily repaired and with less energy dispersion.

Meta-IT also integrated different incubators through the evolution of their project. (Bordeaux numeric agencies, Izarbel technopole...). They have the opportunity to discover other project holders, learnt from each other, sharing the same difficulties. Some courses were also offered during the incubation stage.

Ademe invests in a research project with Meta-It so as to assess the environmental impacts of their computer and produce a state-of-art for green Informatics.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

Comparing to other similar projects, the activity of “sharing with other project holders & capitalization” deserve to be highlighted.

However, Meta-It is not enough satisfied by the support they received during the project. Few institutions plays the game to integrate Alt PC in their workstation.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

The policy supported above all the process innovation as well the measurement of environmental impact of the computer though an LCA.

**14. Through which supports? Non-repayable financing , subsidized financing, support in terms of competences, etc.**

The support is mostly accorded in form of subvention, subsidized financing but also in courses, collaborative activities, networking...



## GP 6: Ouateco produces cellulose wadding from local newspapers

---

BUILDING

**Organization/Company name:**

Ouateco

**Title of Good Practice**

Ouateco

- 1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

Ouateco is an industrial and family company created in april 2009 who propose a new environmental and innovative vision of the production of paper recycling based eco-materials : the cellulose wadding. She engages in the creation of a network with local second-hand stakeholders, insulation and buildings experts. The company owns a 0 energy factory able to produce 10.000 tons of cellulose wadding/year.

- 2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

The building industry consumes more than 40% of final energy and contributes for 25% of national greenhouse gases. This involves the need to create new building technologies able to reduce energy consumption. One solution is to reinforce the insulation.

Moreover, only 47 % of papers are recycled and re-transformed into paper. It constitutes the main furniture (70%) used by French employees (in diminution). So efforts need to be realized to reduce the use of paper, to reinforce the collect and find new uses for paper.

Transforming paper into a new insuling material, produced locally, is a new challenge to commit with.

- 3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

Ouateco aims to locally produce cellulose wadding in a 0% energy building and help citizens to minimize their consumption.

It concerns inhabitants who want to insulate walls when they build or renovate appartments or houses. There is a strong competence between insolent materials. The originality of cellulose wadding lies in its technical and ecological properties (thermic, noise). It's insulation reduces the temperature in the habitat of 5 degrees and saves 25% heating.

It exists different ways of applications for cellulose wadding : blowing, insufflation, wet spraying.

- 4. What is the content of the Good Practice? Describe the concrete activities implemented.**

\* Constitution of a familial SARL with 4 keys players : Jean Toniutti, father and his Thierry Toniutti, commercial manager, Sandrine Delsol, DAE, and Karine Huygues ( a consulting in thermic studies).

\* Construction of the factory and the production line in 2010 : The building is in wood, insulating with cellulose wadding.

\* The activity starts and reaches 2500 tons of cellulose/year.



\* Partnerships with Emmaus, Envie, Landes allow to obtain an important capacity for paper collect.

\* A network of distributors and application experts is created and accessible on the website.

\* The university of Bordeaux and Ouateco launched a R&D study to characterize new cellulosic fiber able to enter in cellulose wadding production process.

**5. What is the implementation process? Describe the process followed for practical implementation.**

The main activity consists in the production of cellulose wadding. it follow the process below :

- Collect papers (newspaper, magazine... ),
- Transport and store them,
- Grind,
- Brew the paper waste with some additive binder ( boron salt )
- And compact the cellulose wadding in bags of 14kg.

Other activities are realized :

- Ouateco offers advices and education on sustainable construction. For instance, they propose a visit of the plant.
- They are consolidating their commercial and selling activities to promote cellulose wadding.
- They train and facilitate a network of distributors and experts for cellulose application.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

As a responsible manufacturer of cellulose, Ouateco lead by example to prove that it is possible to reconcile economic progress and sustainable development.

They chose to perform in France, an ecological insulation materials from recycled newspaper that has already proven itself in the northern and eastern Europe, the cellulose wadding.

Ouateco will meet the growing demand of the French population for ecological insulation (ecowool) and help reduce CO2 emissions generated by transport.

By manufacturing in France, they develop a regional sector of waste recovery through recycling of unsold newspapers, the raw material of our insulation material.

They also chose to construct an ecological and environmentally friendly industrial building wooden structure, wooden boxes, wooden cladding, insulated with their cellulose. They will provide special care to the development of green spaces around the building so they retain vegetation endemic. The architectural organisation were installed in Anglet in the Basque Country. They respect HQE specifications and promote the preservation and integration into the natural site.

**7. To which sectors does this Good Practice refer?**

Construction, Building, paper recycling

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**





The establishment of Ouateco factory in Aquitaine matches several ethical goals:

- \*Creation and development of local industries who values newspapers and papers in our region in a circular way.
- \*Creation of 7 jobs in 2010 on the site of Saint Geours de Maremne in the Landes (40), in partnership with an engineering company thanks to a patented industrial process.
- \* They offer a cellulose wadding with a performance equivalent to wood fiber for a very affordable price).
- \* The insulation is locally manufactured in the Landes region, by promoting recycling southwest newspapers. This is a 100% cellulose wadding French. It has a Lambda 0.038 certified Acermi and FCBA (related to process quality and selected raw material)
- \*They have implemented traceability on all cellulose wadding bags.
- \*Our factory is an environmentally sustainable "pilot project in France", built of wood, complete solar roof; BBC office, insulation with Ouateco product.
- \*Studies to highlight the performance of "Ouateco" show measured results for achieving 26% of heating costs compared to a conventional insulator and a phase difference of 9 and 12 hours (2-4 hours for mineral wool )
- \*Ouateco has an approved training center for craftsmen and partners to implement the insulation Ouateco in the rules of art.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

The building norms are changing very quickly. However, the process with the use of Boron salt, *sel de Bore* took time to be recognized as a non toxic treatment.

Moreover, the acceptance of cellulose wadding slow down because of the confusion between boron salt and the toxic ammonium salt based products. In this context, it was hard to convince people to choose this type of cellulose.

Moreover, there is a strong competence in the wadding and insulating market.

Thus, in 2015, the activity was not sufficient to be profitable for the company. The capacity of production is higher than the quantity produced.

Recently Ouateco designed a Project named "ZERO Concept" to build a new plant dedicated to the transformation of any kind of biosourced materials into rigid insulating panels. They found an existing process they want to put in place in the Landes, keeping the same objective. They face the traditional problem of finding investors for developing the project.

**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

All information about Ouateco can be found through the website : <http://www.ouateco.com/en>. Videos were realized to improve awareness around eco-construction, circular economy, processes and companies.

The project can be transferrable, particularly by the way of building a sustainable eco-efficient plant when designing such a project.

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

Policies : financing, networking and supports.

The company takes part of the circular economy pioneers in Aquitaine. They actively participate to the association "Aquitaine croissance verte". They are supported by the region. They obtained a trophée of "l'Aquitaine de l'année 2011-2012" - Social responsibility corporate.

They are supported by Aquitaine Development Innovation since 2009, and aquitain industrials such as Finsa, Gascogne or Agrofibre.

They are active member of Ecima, european union of cellulose wadding manufacturer and APM, an industrial club for management & progress in Landes.

The cellulose wadding is controlled by several organisms like CSTB and AMB.

They are familiar with R&D projects like the CiCLABat project in collaboration with Nobatek and Apesa, and worked with the university of Bordeaux and international partners.



The Ouateco Project contains both process, environmental and social innovations.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

Compared to other similar projects, Ouateco integrated a zero energy and waste philosophy in the way they thought and then built their line of production.

They have a pragmatic approach and are curious to bring innovative process into their own territory.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

The policies helped the cooperation (thanks to agencies and clusters), the creation of jobs and the measurement of environmental impact. (certification of the cellulose wadding : ATE, ATEC CSTB, Acermi (value lambda certified 0,038))

**14. Through which supports? Non-repayable financing , subsidized financing, support in terms of competences, etc.**

% Financing of R&D analysis, Circular Economy and innovation competence (ADI / APESA) , Certifications



## GP 7: Le Relais collects, sorts, transforms and sells textile products

TEXTILE

### Organization/Company name:

Le Relais

### Title of Good Practice

Le Relais

- 1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.**

The collection and recovery of TLC (textile, shoes) is one of the actions that can reduce waste volumes communities that are landfilled or incinerated, and thus achieve the objectives set by the French Grenelle law. Since 1 January 2007, the French government has expanded the legal liability of companies selling TLC to the product waste. It requires them to provide or contribute to the recycling of products placed on the market for consumers. The eco-organism EcoTLC was created to manage the national recovery and recycling of textile waste for use by households & market. Le Relais is an ancient stakeholder who collect, sort & valorize used textiles and an active member of the Eco-TLC organism.

A multiplicity of actors are operating in the field of used textiles: charities, insertion through economic activity, cooperatives, fripiers, private companies.  
60 sorting centers of Le Relais signed an agreement with EcoTLC.

- 2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.**

Over 2.5 billion TLC pieces, 600 000 tons and 10 kg / year / person, are placed on the market each year. Their collection and recycling aims to manage their end of life so as to answer environmental, economic, social objectives:

#### ENVIRONMENT:

- Master the volumes of waste for communities
- Preserve natural resources
- Limit greenhouse gases and pollution

#### ECONOMY:

- Restore value to waste
- Create activity and employment

#### SOCIAL:

- Reserve these jobs for people who are remote (little or no qualifications jobs) through pathways to integration through economic activity
- Promote solidarity through the actions of numerous associations

Less than 2 kilos of used TLC were the subject of a separate collection in 2009 and 2.6 kilos/person in 2014. The goal is to reach 4.6 kg per person by 2019 (target set by the Eco TLC approval, eco-organization of the sector for the 2014-2019 period).

At the level of Aquitaine, it is therefore 16 675 tons to collect and recycle by 2019. 4100 tons collected and sorted in the sorting center Relay Gironde, 25% of the Aquitaine deposit.

- 3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

The objects of the Gironde Relais is the fight against exclusion by creating as many jobs as possible, reserving them to people in social difficulty ( unemployed, exclusion...) through the collection and recycling of TLC.



**4. What is the content of the Good Practice? Describe the concrete activities implemented.**

Collection of TLC by voluntary contribution points on a radius of 150 km around the sorting center.  
Creating a TLC sorting center that can process 4100 tons of TLC.  
Re-employment of clothes toward under-development country via the national network.  
Recycling of bad qualities textiles via the national network (creation of “le Métisse”, insulating materials based on jean wastes)  
Development of a regional network of second-hand shops to market quality store (3 stores opened to date on the 8 planned).

**5. What is the implementation process? Describe the process followed for practical implementation.**

1st phase: expansion of the collection to reach 4100 tons collected annually (2008-2013), sent toward the other national Le Relais centers.

Phase 2: creation of the sorting center (2014)

Phase 3: development of the retail network (2014-2019)

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

TLC are collected and sorted in the same territory.  
Re-giving a second life to TLC and limit the production of new products.  
Recycling non-reusable TLC will be recycled (cloth wiping 1st material for insulation, upholstery, textiles, energy production ...)

**7. To which sectors does this Good Practice refer?**

sectors of the apparel, automotive, textile industry ...

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

70 sustainable jobs in 8 years, 70% for those who are remote.  
21,000 tons of TLC that avoided the burning or burial since the creation of Relais Gironde.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

Development of long collection (question 6) is subject to the approvals of local authorities who fear harm or jeopardize the associations of their territory.

Financing of investments to create a sorting center.

Irregular and / or unprofitable opportunities for some products (bad qualities (humidity), oldfashioned, colorless...)

Marketing & selling in politically and commercially unstable countries

Prices of products subject to the rules of supply and demand.

Developing the network of shops: find a suitable local, find a customer for opportunities.

The way forward: promoting opportunities in short circuits, master the chain of life of the product as a whole (from collection to marketing a finished product: Metisse example), professionalizing the network of stores and encouraging purchases used goods

**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**



Easily transferable project on territories

<http://www.lerelais.org/>

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

The public institutions are concerned by the project in different ways:

- The EcoTLC organization, depending on the French government helps to the collaboration between various stakeholders around used materials. They proposed collective actions, research projects to improve how this material is treated and are concerned by the environmental improvement of processes. (technical, environment and social innovation)
- Several public organizations (Pole Emploi, UNEDIC...) propose special contracts for fostering the reduction of social exclusion. Le Relais is labelled “ Integration company” and collaborate with these organizations, education and social specialists to create job and support each employees in its reintegration.
- Collectivities are involved for the installation of collecting spaces in several neighborhoods in city and negotiations are engaged for the access of locals.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

These policies create an impact on employment (2500 creations at the scale of France) and on environment (4 100 tonnes of waste avoided each year on the project area).

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

The policies support the most the job creation (via social integration contracts), cooperation between different stakeholders (via Eco-TLC).

**14. Through which supports? Non-repayable financing, subsidized financing, support in terms of competences, etc.**

They offer subventions to reduce the salary fees per employee.

Eco-TLC is used to launch call to tenders concerning key problematics in TLC recycling industry. (Access to new competences (university collaboration...) and R&D investment)



## GP 8: I-ener produces local energy thanks to citizen participation

ENERGY

### Organization/Company name:

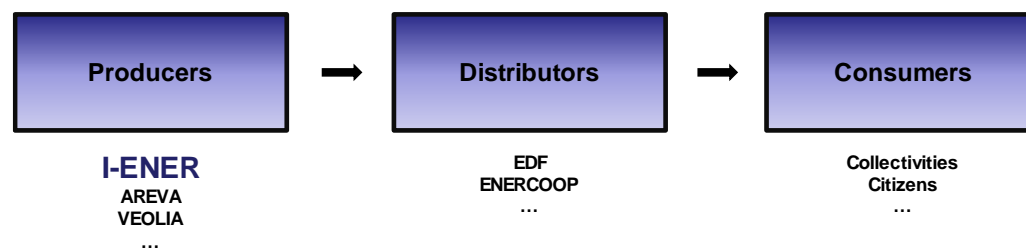
I-ENER

### Title of Good Practice

Development of a renewable energy sources cooperative

#### 1. Identify the Good Practice. Describe the territorial influence of the policy, the number of activities/companies interested, the timescale of the good practice, the involved bodies/organizations.

The good practice is about the development of a citizen cooperative focusing on the development of renewable energy project in the Bask country, though citizen funding– mainly the production of electricity or heat (e.g. photovoltaic, biomass, etc.).



National regulations concerning sustainable transitions tend to better integrate citizens in renewable energy projects.

I-ENER was created in 2015 and now involves about 200 shareholders and until now has developed 2 mains photovoltaic projects.

I-ENER involves:

- Citizens, shareholders of I-ENER
- Bask collectivities who want to develop project in their territories

Concerned territory has not specific policies for renewable energy development; energy strategies have historically been very centralised in France.

#### 2. What is the background of the Good Practice? Describe the problem addressed and the context of the GP.

Until now, more than 90% of the energy consumed in the Bask country is imported and consequently, the territory is absolutely not resilient concerning the energy.

In parallel, there is a lot of grassroots initiatives in the Bask country concerning the circular economy and the empowerment of the territory.

Consequently, the problem addressed in this GP is how to foster the development of renewable energy projects through a stronger involvement of citizens.



**3. What is the objective of the proposed Good Practice? Describe the objective, the target group and the needs the GP aims to satisfy.**

The objective of this GP is the development of renewable energy project in the Bask country through citizens fundings, but also the education of collectivities and citizens to the problematic of energy.

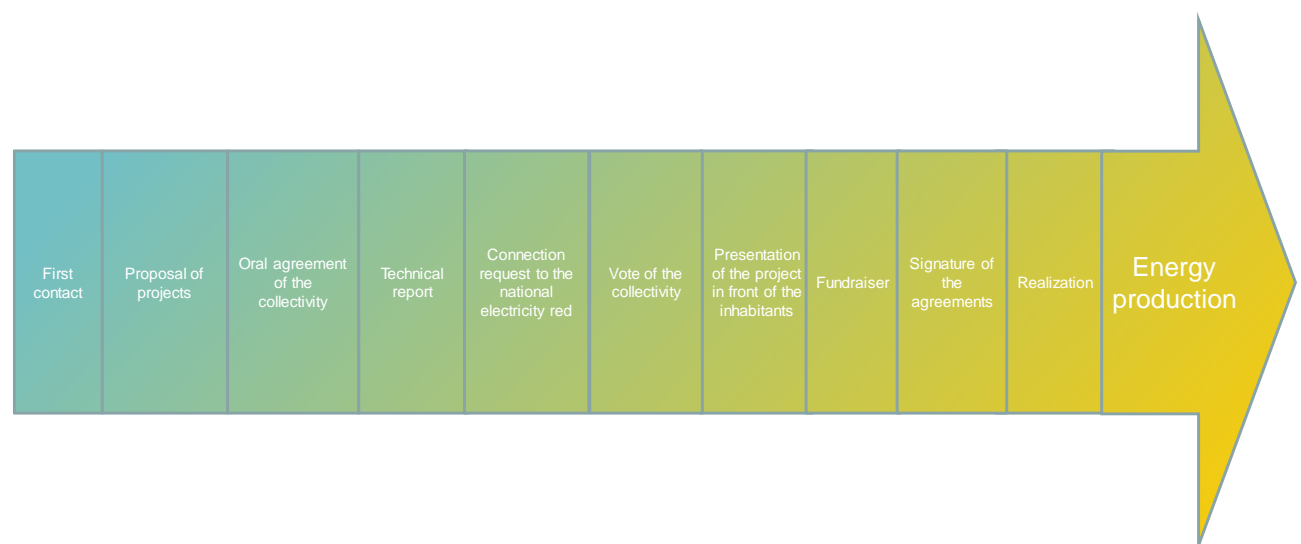
These project are mainly focused towards collectivities.

Consequently, there is two main target groups:

- The collectivities: they identify and propose public buildings (existing swimming pools, schools...) to implement renewable energy projects ( like the implementation of solar panels on roofs, or the development of micro methanization plants )
- The citizens: they become shareholders of I-ENER and bring citizen fundings

The needs I-ENER aimed to satisfy is to foster the development of the renewable energy in collectivities but also to create employ and more generally local value in the Bask country.

**4. What is the content of the Good Practice? Describe the concrete activities implemented.**



2 photovoltaic projects have been realized until now in Uztaritz (Bask country) on public buildings (2 x 9kWc). As illustrated the main step of a project are the following:

- A first contact with a collectivity, in order to identify a relevant public building to install photovoltaic panels.
- If the collectivity is interested, I-ENER study the feasibility of the project and write a technical report of the project. This study also implies a request to Enedis (the national operator of electricity distribution system in France) to connect the photovoltaic panels to the national electricity red.
- If the project is relevant, the collectivity proceed to an official vote.
- Then, I-ENER presents the project in front of the inhabitants in order to collect funds.
- Then, all the agreements between I-ENER and the collectivity are signed and the project is realized.
- To finish, the photovoltaic panels are connected to the national red and I-ENER can sell the electricity to an electricity distributor.

**5. What is the implementation process? Describe the process followed for practical implementation.**





The implementation process I-ENER is the following:

- The Identification of various interested people around the project, through informal meeting (experts in energy, activists, NGO, etc.).
- The structuring of a core group to open the discussion around the project: observation of existing organization in the territory, ideation around business models
- The drafting of statutes of the company and the official launching of the project
- The participation in different meetings and events in the territory to communicate and to propose citizens to join the project and become shareholders. In parallel, a communication plan (web site, etc.) is developed.
- The prospection and negotiation with collectivities to identify a first project of renewable energy to be developed.
- The development of the cooperative (first general meeting with all shareholders, first employee, etc.) but also the identification of first partnership with other actors in the territory.

**6. Which is the aspect of the good practice related to CE and SD? Describe the specific practice of reuse/recycle linked to output-input concept.**

This good practice is particularly related to two main aspect of Circular economy and sustainable development:

- The identification of local resources (water, sun, wastes, etc.) to develop renewable and local energy, with a limited environmental impact.

The GP aims to develop renewable energy projects with collectivities such as photovoltaic panels but also methanization to produce energy from biowaste, or the development of a micro plant to produce energy from timber.

- The development of a circular business model

This GP is focus on local investment, local shareholders, and local partners in order to develop its activity.

- The sensitization of citizens to the problematic of energy and sustainable development in the territories.

**7. To which sectors does this Good Practice refer?**

This GP particularly refers to the energy production sector. It also includes financial sector.

**8. What are the main results achieved by the Good Practice? Describe beneficiaries, the success factor and the lesson learnt**

From this good practice, two first projects were developed in Uztaritz.

The main beneficiaries are the collectivities who can improve the rate of renewable energy in their territory.

Other beneficiaries are the different companies involved in the supply chain (photovoltaic panel manufacturers, fitters, etc)

To finish, citizens are also beneficiaries of the project, being shareholders of the company.

**9. How is it possible to improve this Good Practice? Describe the main difficulties encountered and further development or improvements foreseen.**

The main difficulty is the connection to the national electricity grid. The national operator can block the project if he does not accept to connect the panels.

Other difficulty is the patrimonial protection operator who can block a project if he considers that the buildings is damaged.

A last difficulty is that there is not a clear legislation for companies who want to develop citizen's fundings.



**10. How is it possible to exploit the Good Practice? Describe the media used and the degree of transferability**

It is possible to exploit the good practice through the website of I-ENER (<http://i-ener.eus/>), but also through different partners of I-ENER: Enercoop, or the RESCOOP European network or renewable energy cooperative.

**11. Which innovation does the policy related to the Good Practice offer? Technical, environmental, social, economic innovation.**

Environmental, social and economic innovation is applied in this practice.

From a technical point of view there is not any innovation as IENER uses mature technologies.

The innovation is related to an economic innovation, in particular the mandatory repurchase of electricity by the national distribution operator at a relevant price.

I-ENER is also analyzing the possibility to sell the electricity to Enercoop-Aquitaine which is a cooperative for distribution working in Aquitaine scope.

Moreover, there is some subvention when a company create jobs in the Bask country.

From a social point of view, the practice allows the citizen become shareholders of renewable energy installations. Moreover it creates a debate between citizens for big renewable projects.

From an environment point of view, only renewable energy development is supported. Moreover, I-ENER participates in project for encouraging energy consumption decrease.

**12. Which aspect does this policy improve compared to other existing policies? Describe the most successful improvements introduced / realized.**

There are several companies that produce electricity from renewable sources. Policies that improve distributed electricity production offer benefits for environment and decrease territorial dependency on energy.

In this case the improvement is not from a technical point of view but from a social and economic point of views. Indeed, renewable energy development is supported by social participation, and economic benefits are kept in the territory. The goal is to re-invest these benefits into energy related projects that are not so economically interesting, for example insulation of buildings.

**13. Which aspects did this policy supported the most? Cooperation, specific technical innovation, process innovation, measurement of environmental impacts, creation of jobs.**

The policy supported above all an economical innovation (mandatory repurchase of electricity) and the creation of jobs.

This economic innovation is based on citizen participation as each shareholder can invest money with a very limited risk and see the repercussion in the territory: installation of renewable facilities and creation of jobs.

**14. Through which supports? Non-repayable financing , subsidized financing, support in terms of competences, etc.**

The support is mostly accorded in form of special tariffs for the electricity produced by renewable energy process and in form of a subvention for the creation of a job in the territory.

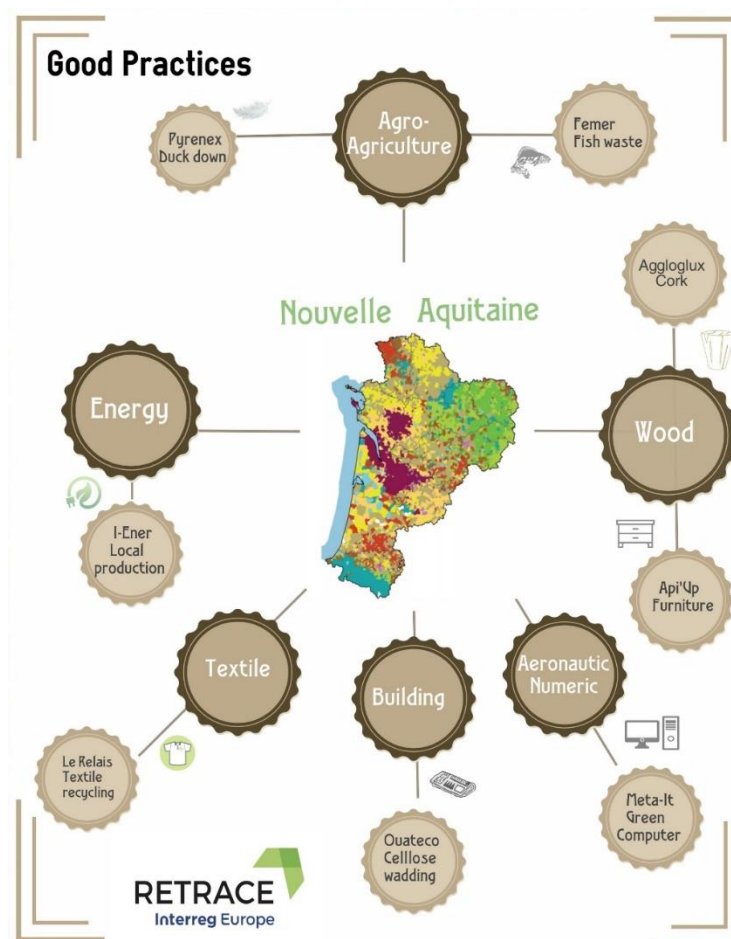
Special electricity tariffs are decreasing and I-ENER's business model might be modifies in the next years.

Three criteria will be considered for the definition of the new business model: New renewable electricity tariff, electricity selling prices evolution and renewable energy facilities cost (specially photovoltaics technology cost decrease).

The subvention for job creation is not specific for this sector; it is the standard subvention applied in France for the job creation for young people.



<b>Good Practices selection in Nouvelle Aquitaine, France</b> .....	1
GP 1: Pyrenex, collects and transforms local duck leather into down for textile and bedding products .....	3
GP 2: Femer, collects and transforms fish skin for leather based products .....	6
GP 3: Agglolux, manufactures cork based products from local and/or recycled corks .....	9
GP 4: Api'Up transform sold furnitures into new high quality design products .....	13
GP 5: Meta-IT designs a eco-efficient computer .....	18
GP 6: Ouateco produces cellulose wadding from local newspapers .....	21
GP 7: Le Relais collects, sorts, transforms and sells textile products .....	25
GP 8: I-ener produces local energy thanks to citizen participation .....	28



Links toward other modes of visualization :

<http://easel.ly/infographic/63n27c>

<https://kumu.io/missreal/retrace#gp/gp-22-23-of-september/good-practices>

Contacts : Marion REAL – [m.real@estia.fr](mailto:m.real@estia.fr), Cyril Baldacchino : [Cyril.baldacchino@apesa.fr](mailto:Cyril.baldacchino@apesa.fr)