

alveo**v**e

Apprentissage et **L**ocal **V**Élo
pour **O**ffrir une **L**iberté de mobilité **E**conome en
énergie

*Cycling lessons and parking solutions to give
access to sustainable mobility and energy
efficiency*

VELOCITY- JUNE 2017



French Cycling Federation FUB



Created in 1980

Composed of 254 NGO with more than 30.000 members and representative of 13 millions of daily cyclists

78 organisations giving bicycle lessons (in majority training courses for adults)

88 bike-repair organisations working on solidarity-based economy

A specific national program to tackle energy poverty

- At the end of 2016, FUB won a national call from Ecology ministry on « *information and training on energy savings* » specifically dedicated to low income households (about 5 millions of people)
- The main interest of this tender is to give access to Energy Efficiency Obligations (EEOs) / White certificates
- Generally dedicate to house equipment (insulation, better boilers...), EEO programs can also help to change travel behavior: walk or ride bicycle instead of taking the car saves petrol, reduce GES and CO2 emissions
- 40% of low income households have no cars, often no driving licence or old cars forbidden in city-centers because of pollution... they have to work in staggered hours... so cycling is a good opportunity!

Energy Efficiency Obligations (EEOs)

Introduced in France since 2005 to encourage energy savings, benefitted mainly to residential sector but opened recently (2011) to transport sector

Energy companies = suppliers have energy obligations:

- Inside the company
- Or for the benefit of other companies, local authorities, citizens

Level of obligation depends of companies (quota)

EDF, TOTAL,
DIRECT
ENERGIE,
ENGIE, DALKIA,
AUCHAN...

Local authorities, social housing sector (“Eligibles”):

- can have a contract with a supplier to exchange with him a volume of savings against money
- or sell EEOs via EMMY platform Web (French register for EEOs)

The failure to reach the EEO results in a financial penalty for an obligated company

The Unit : **kWh cumac** (cumac for cumulated and actualisé= updated) = kWh saved with the program

For this program, the amount of energy savings is a theoretical calculation: 8€ spent gives 1MWh cumac
Total PRIMARY ENERGY SAVINGS associated with this project: **410 GWh cumac** (corresponding to a total investment of 3.275.400 euros HT)

Economical, environmental, social impact

In France 75 % urban travel < 3km and 60% of them made by car

Economic goal



- A car cost 5000€/year included 1000€ for petrol (INSEE)
- 1/5 of households spend 20% of their budget for daily mobility
- Between 50 and 100€/month of savings if a family keeps its car but use sometimes a bike; 300 to 500€/month if family replace a car by a bike (UNAF study)

Ecologic goal

- Cars produce 60% of GES coming from transport
- Polluted air caused 48 000 anticipated death each year

Social goal

- Mobility is a human right : but 50 % of work appliers refused an offer because of lack of transport
- 40% of French territory non irrigated by public transport
- Physical inactivity cost 1Md€ (French Senators Chamber)



1250€/ year
heating + lighting



<100€ for a
second hand
bike
+40€ /50€ for
usual
maintenance

Fears and difficulties related to cycle use

First of all people are afraid of theft



In poor neighborhoods, they have also more difficulties to read maps, to learn road safety rules; some never learned cycling



So in these areas, a lone safe bicycle park is not enough to encourage people to ride a bicycle: they have to be trained step by step

Alveole target

Who can contract?

Social landlords who house low income **households** suffering of energy poverty
FUB members with a BIKE SCHOOL service

Program global target



Social landlords build or repair **150 safe**, convenient **bicycle sheds** for their tenants



FUB members train **2.250*** tenants to benefit of cycling

Program global benefits

2.250 persons can run **3,3 millions km** by bike (7km/household on 200 days a year)

Energy savings : **260.000 liters** of petrol, equivalent of **450 tons** of CO2

Technical Partnership



private company specialised on energy advice & EEO's market

(* 150 parkings x an average of 15 units= 2250)



Our supports



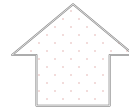
Alveole description



Creation or renovation of safe bicycle sheds in existing buildings



Facultative: bike repair lessons is a plus for the program



alveole



Bicycle lessons given to adults by FUB members

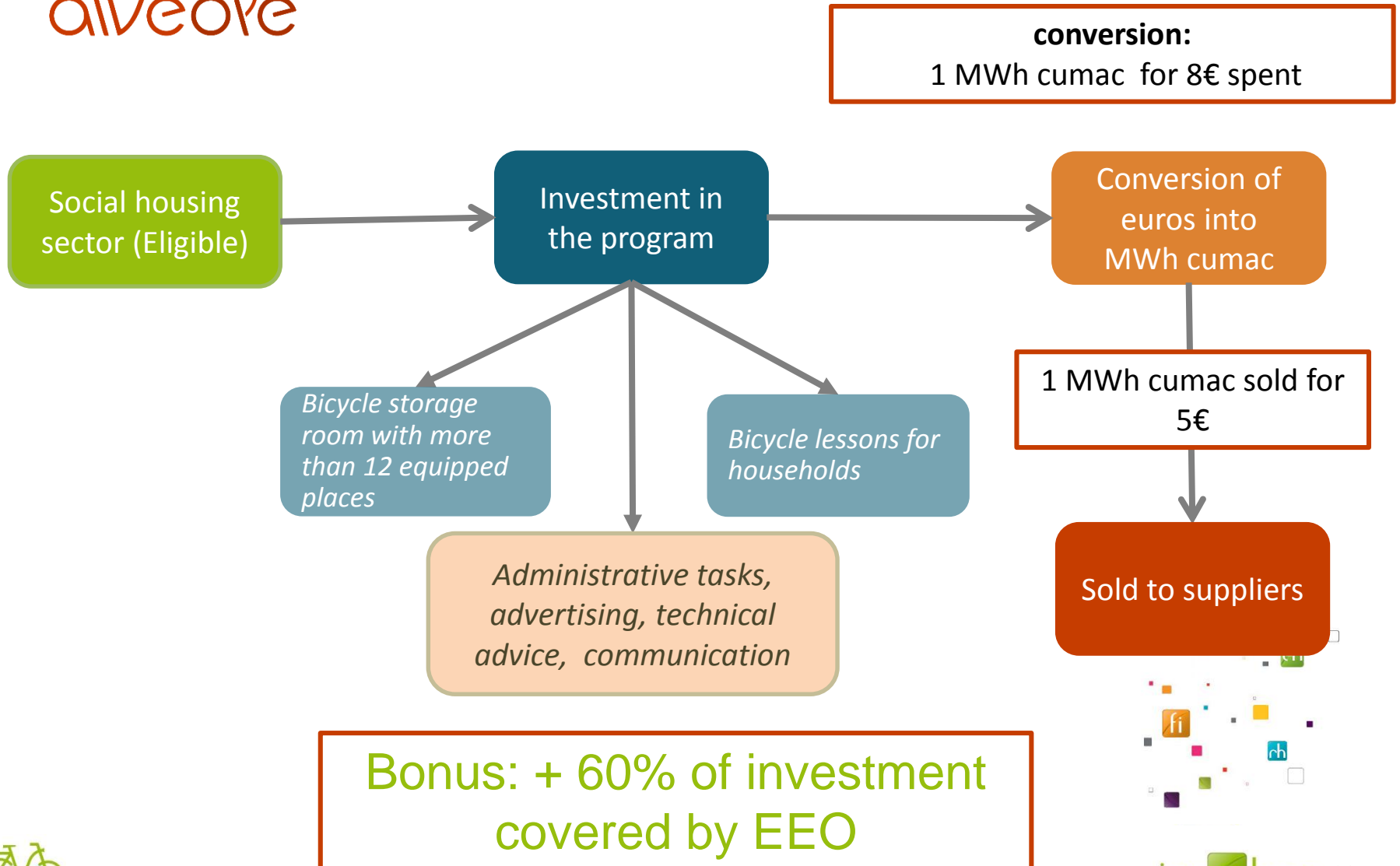
Bicycle shed specifications

- A high degree of security is required to prevent theft: proper infrastructure and equipment (bike racks ...)
 - Number of spaces > 12
 - Parking must be covered, lighted, locked (badge or key), with equipment to support and fasten the bike (bicycle frame and a wheel)
- Easy to access:
 - Not necessary to carry the bike, to take a lift or steps (groundfloor or basement)
 - Maximum 2 doors opening by hand



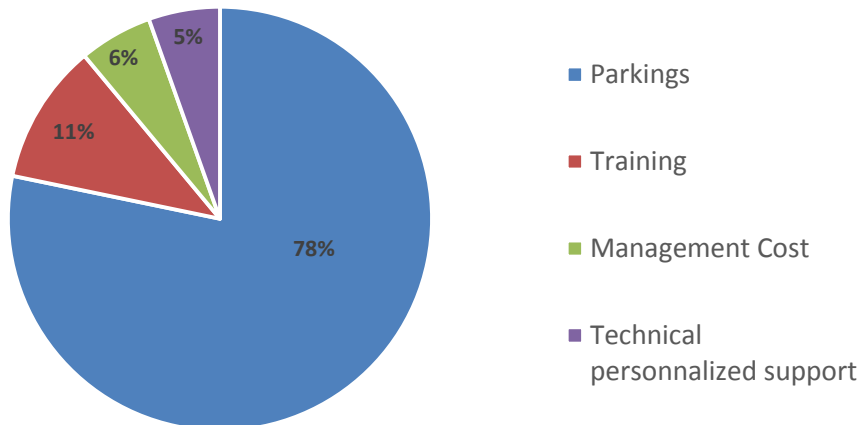
Financial process

alveole



Financial information

ALVEOLE Total Cost



1.124€ max / equipped space
so for one storage room of 20 spaces:
22.480 € HT

333€/ training, personalized support
and management
So for 20 persons : **6.660 €**

Total expenditures : **29.140 €**

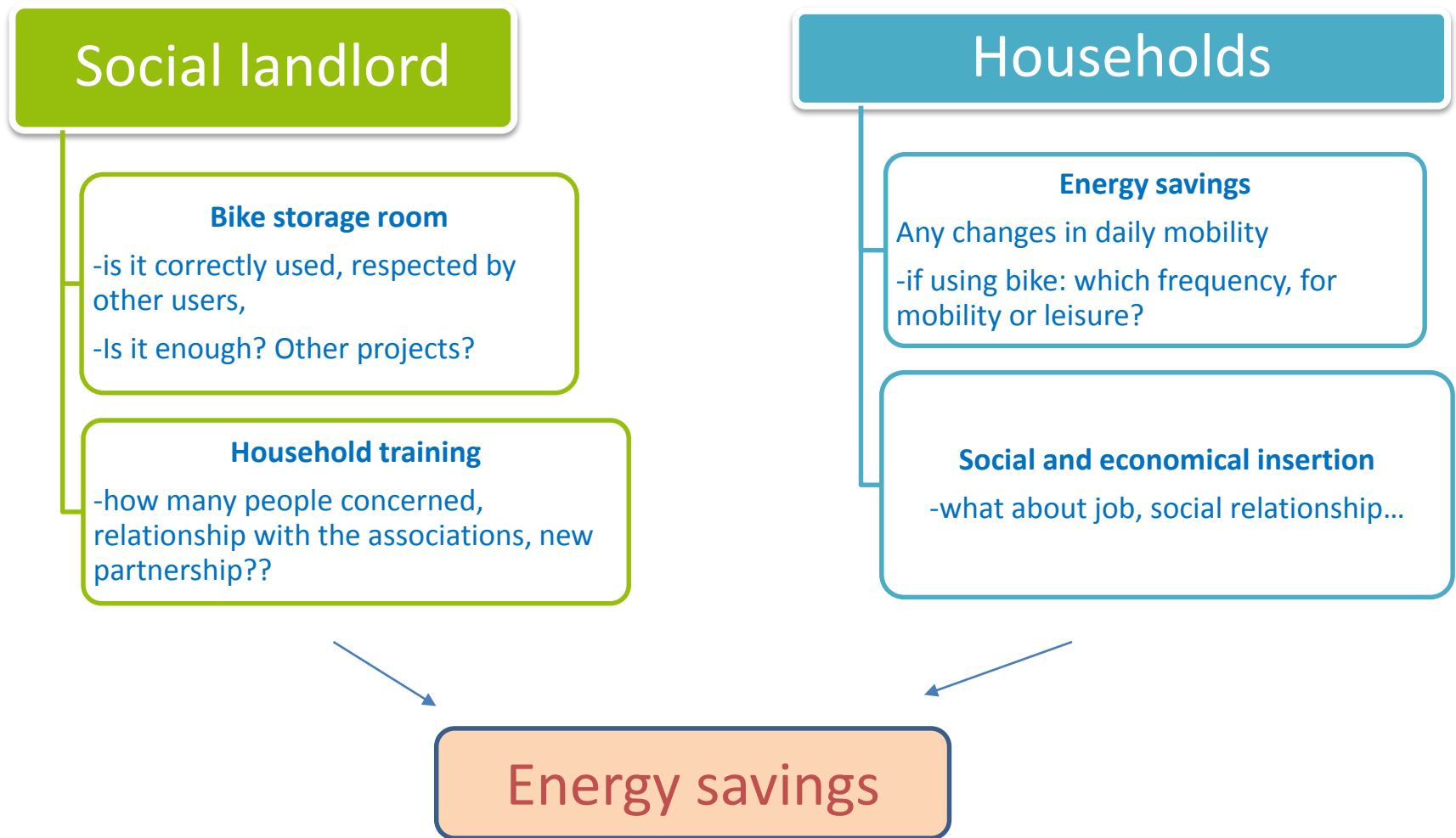


Volume EEO = 3 642 MWh cumac

Sales of EEO= 18 213 €
(conversion rate 5€/MWhcumac)

Actually paid: 10 927 €

Evaluation criteria (non exhaustive)



First results of ALVEOLE program

Increase

- the number of bicycle sheds in social neighbourhoods, in existing buildings

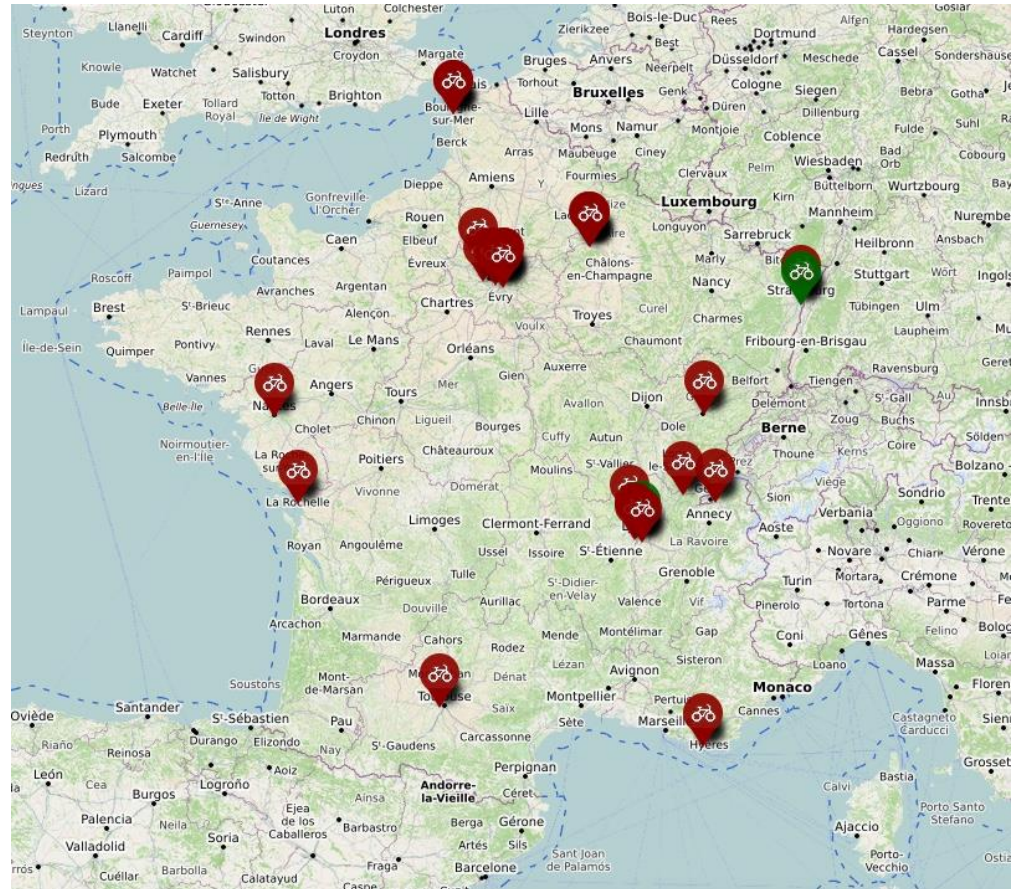
Impulse

- Creation of new bicycle-schools
- New vocations to become bicycle trainers

- The “daily” use of bicycle

Encourage

- Housing managers to realize safe and equipped bicycle sheds



Can ALVEOLE be developed in other countries?

Cycling is the best opportunity to save energy,

Several countries have adopted an EEOs mechanism

ALVEOLE stimulates cycling in poorer neighborhoods in order to create a better access to jobs and services

ALVEOLE increases climate change awareness

ALVEOLE is an important financial incentive for lordlanders to built safe bike parks

so we suggest ALVEOLE can be developed in every country **with the benefit of EEOs**

More details and an introduction film on ALVEOLE <http://www.fub.fr/alveole>

Please contact us contact@fub.fr - 033 388 75 71 90

Thanks for attention !

alveole

<http://www.fub.fr/alveole>

