Apprentissage et Local VÉlo
pour Offrir une Liberté de mobilité Économie en énergie

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

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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)
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**
- **inventage** 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

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

Conversion:
1 MWh cumac for 8€ spent

Investment in the program

Conversion of euros into MWh cumac

Social housing sector (Eligible)

Bicycle storage room with more than 12 equipped places

Bicycle lessons for households

Administrative tasks, advertising, technical advice, communication

Sold to suppliers

1 MWh cumac sold for 5€

Bonus: + 60% of investment covered by EEO
Financial information

**ALVEOLE Total Cost**

- **78%**
- **5%**
- **11%**
- **6%**

- Parkings
- Training
- Management Cost
- Technical personalized support

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 €**

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**Volume EEO = 3 642 MWh cumac**

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

Actually paid: **10 927 €**
Evaluation criteria (non exhaustive)

Social landlord

- Bike storage room
  - is it correctly used, respected by other users,
  - Is it enough? Other projects?

- Household training
  - how many people concerned, relationship with the associations, new partnership??

Households

- Energy savings
  - Any changes in daily mobility
    - if using bike: which frequency, for mobility or leisure?

- Social and economical insertion
  - what about job, social relationship...
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](http://www.fub.fr/alveole)

Please contact us contact@fub.fr - 033 388 75 71 90
Thanks for attention!

http://www.fub.fr/alveole