



EUROPEAN
COMMISSION

Community Research

CIP

(Contract Number: **FP6/036455**)

REPORT D2-5 / A Final Research Briefs 2

Title of report: SUSTAINABLE TERRITORIAL DEVELOPMENT
ASSOCIATED WITH RADIOACTIVE WASTE MANAGEMENT

Main Author(s): C. Réaud, C. Schieber, T. Schneider (CEPN)

Date of issue of this report: 17/04/09

Start date of project : 1st January 2007

Duration : 36 Months

Project co-funded by the European Commission under the Sixth Framework Programme Euratom Research and Training Programme on Nuclear Energy (2002-2006)		
Dissemination Level		
PU	Public	PU
RE	restricted to a group specified by the partners of the CIP project	
CO	confidential, only for partners of the CIP project	

CIP



1. Introduction	3
1.1. Aim of the study.....	3
1.2. Methodology	3
2. Geographic and socioeconomic context of bure territories	3
2.1. Brief description of different decision levels in France.....	3
2.2. Geographic context of Bure territories	4
2.3. Demographic trends	4
2.4. Socioeconomic context of the territories around Bure.....	5
3. Main processes associated with the laboratory contributing to economic development	5
3.1. Chronology of the economic development actions	6
Economic opportunities directly associated with the construction and operation of the laboratory and future disposal	7
3.2.....	7
3.3. Public Interest Groups of Meuse and Haute-Marne	8
3.3.1. Creation and objectives of GIPs.....	8
3.3.2. Structure of the GIP.....	8
3.3.3. Financial support for the GIP.....	9
3.3.4. Actions supported by the GIP.....	11
3.3.5. Direct beneficiaries of economical support	12
3.3.6. Feedback experience of GIPs	12
3.3.7. Potential improvement of the GIPs functioning	13
3.4. Specific actions implemented by the radioactive waste producers EDF, AREVA and CEA	14
3.4.1. Creation of High Level Committee.....	14
3.4.2. Program of economic development set up by nuclear industry	14
3.4.3. Reflections about the economic development	16
4. Preliminary reflections on sustainable territorial development.....	16
4.1. Economic development: a key element for ensuring a sustainable vigilance	16
4.2. Setting up partnerships	17
4.3. Benefit package and selection process	17
4.4. Dedicated structure for economic development	17
4.5. Conditions of success.....	18
ANNEXE 1.	21

1. INTRODUCTION

This research brief presents the economic development associated with the laboratory for a deep geological repository for high activity radioactive waste situated in the municipality of Bure. It has been described in the framework of the first topic in the project COWAM In Practice (CIP), i.e. the sustainable territorial development associated with radioactive waste management.

1.1. Aim of the study

The aims of this study are to:

- Present different procedures put in place to develop the local economy in the specific socioeconomic context of the municipality of Bure
- Define roles and perceptions of different stakeholders (local actors and industrialists involved)
- Analyse the efficiency of this process and lessons drawn from feedback experiences (former projects implemented)
- Lead a common reflection on the way of maintaining local development in the context of global, regional development with the cooperation of all the stakeholders involved

1.2. Methodology

In a first step, a documentary analysis has been made to describe the geographic and socioeconomic context of the territories where the underground research laboratory for high level radioactive waste is situated and the current main processes associated with the laboratory contributing to economic development of the territories, i.e:

- Economic opportunities directly associated with the construction and operation of the laboratory via ANDRA (National Agency of nuclear waste management);
- Functioning of the structure created to manage the financial subsidies;
- Direct investments from waste producers.

In a second step, this analysis has been completed with interviews with key stakeholders involved in this economic development process (representatives of waste producers, representatives of “Public Interest Groups” – GIP, and local elected people).

2. GEOGRAPHIC AND SOCIOECONOMIC CONTEXT OF BURE TERRITORIES

2.1. Brief description of different decision levels in France

The local decision level in France is subdivided into 4 levels:

- The “Commune”, corresponding to a municipality, which is administered by

- a municipal council.
- The “Communauté de communes” which is a federation of municipalities, administered by a Community council.
- The “Département”, corresponding to a county, which is a geographic area, administered by a “General Council”
- The “Région” which is a geographic area regrouping several counties, administered by a “Regional Council”

2.2. Geographic context of Bure territories ¹

The research laboratory of Bure is situated in the south of the Meuse County, belonging to the Lorraine Region. Some galleries are reaching the town of Saudron, in north of the Haute-Marne County, belonging to the Champagne-Ardennes Region. Both counties and both regions are thus concerned with the economic development (see Appendix 1.).

The municipality of Bure (Meuse County) had 91 inhabitants in 2008. The main cities in the Meuse County are Bar-Le-Duc (Prefecture, 16944 habitants, last census 1999) and Ligny-en-Barrois (5035 inhabitants, last census 1999). In the Haute-Marne County, the main towns are Saint-Dizier (30900 inhabitants), and Vitry-le-François (16733 inhabitants).

Half of the Meuse County consists of land used for agriculture. A third of the county contains natural areas (forests, woods, lakes and rivers) and the rest contains road and railway facilities, housing and economic activity zones. Around Bure, the density of the population does not exceed 38.9 inhabitants/Km², which qualifies the area as a “geographic depression zone” in comparison with the average density of population of France which reached 113 inhabitants/km² in 2006.

2.3. Demographic trends²

Haute-Marne County

Haute-Marne had 187000 inhabitants in 2005. This county has regularly lost inhabitants for 30 years and if this trend continues, it will lose one inhabitant out of 5 by 2030. The young people (less than 20 years old) are already fewer in number than people of 60 years old and more. The average age of Haute-Marne inhabitants was 40.9 years old in 2005. If the aging trend continues, it will be 47.6 years old in 2030. In the Lorraine Region, there were 1.20 young people less than 20 years old for one 60-year-old or more in 2005. By 2020, this ratio will decrease to 0.80. (Sources : Insee – Eurostat)

Meuse County

¹ Source: INSEE, National Institute of Statistics and Economic Studies

² Source: INSEE, National Institute of Statistics and Economic Studies

In Meuse County, the population reached 192700 inhabitants in 2005. After many years of decrease, the population of Meuse is more stable. Nevertheless, it can be noted that if demographic trends persist, the population less than 20 years old would be reduced from 25 % in 1999 to 22 % in 2020. At the same time, the 60 years old and more would grow from 22% in 1999 to 30% in 2020. In Meuse there were in 2004, 1.14 young people less than 20 years old for one 60-year-old or more. It is estimated that the ratio will decrease by 2020 and will approximately reach 0.72. (source INSEE Écoscopie de la Meuse 2006).

It has to be noted that the migratory balance showing an important deficit for both counties is mainly due to the departure of young adults who leave these territories in order to pursue study or because of job opportunities in more attractive cities.

2.4. Socioeconomic context of the territories around Bure

The area of Bure is located away from the main departmental cities. The local jobs, which depend on the administration and some big firms (notably metallurgical), are not sufficient to ensure an attractive labour market for the young people who are leaving the territory. The main point of interest for these territories is linked with historic tourism (First World War).

The Meuse County presents the most rural character of the Lorraine Region. The army played a considerable role in the local economy of Meuse up to the last reform aiming at massive reduction of military enrolments on all French territories with reduction of 1/3 of the total workforce in the region. Tourism, based on a protected natural area and on historic tourism, represents a potential for economic development.

The Meuse has known a great increase of unemployment rate between 2001 and 2006 (from 7% to 9.5%). Even if there is a decrease since the end of 2006, Meuse still had an unemployment rate of 8% in 2008. In the Haute-Marne County, the unemployment rate was 7.4 % in 2007 (it reached up to 8.4 % in 2006). By comparison, the average unemployment rate in France was 7.5 % in 2007.

3. MAIN PROCESSES ASSOCIATED WITH THE LABORATORY CONTRIBUTING TO ECONOMIC DEVELOPMENT

Three processes play an active role in the economic development of the territories around Bure:

- The economic opportunities directly associated with the construction and operation of the laboratory via ANDRA (National Agency of Radioactive Waste Management).
- The financial support managed by dedicated structures (“Public Interest Groups”, GIP)
- The direct investments from the waste producers

The main features of these processes are presented in this section, after a brief overview of the chronology of the main steps of the financial development.

3.1. Chronology of the economic development actions

In order to have a better view of the whole process linked with the financial accompaniment around the territories of Bure, it is useful to draw briefly the main steps of the implementation of the laboratory as well as the associated actions for the economic development.

The Law No. 91-1381 of 30 December 1991³, required Andra “to implement and operate underground laboratories in order to study deep geological formations”. This law foresaw that measures of economic development could be implemented in territories hosting an underground research laboratory.

Following this law, Meuse and Haute-Marne counties agreed to host a research laboratory for a deep geological repository for high activity and long-lived radioactive waste in Bure-Saudron.

From 1994, the waste producers - EDF (Electricity of France), CEA (French Atomic Energy Commission) and AREVA (nuclear operator) - started to provide financial support by implementing actions in collaboration with the counties.

In May and August 2000, two “Public Interest Groups” (GIP) were created respectively in the counties of Meuse and Haute-Marne by interdepartmental decrees: these structures manage the financial support provided by the waste producers (EDF, CEA and AREVA). The amount of the subsidies is approximately 10 M€/year/GIP.

Since March 2005, the waste producers, in partnership with local actors, embarked on new actions having an impact on local activity and employment.

In July 2005, the French Government decided to create a High Level Committee (HLC) chaired by the Minister of Industry and with representatives from industries as members in order to coordinate and approve the financial development actions. The first meeting of this Committee was organised in December 2005.

In June 2006, the law on sustainable management of radioactive waste was promulgated. This law plans to pursue and reinforce the local support. It requires the publication by industrialists of annual public reports on their economical support actions. The first reports were published at the beginning of 2007. With this law the laboratory is no longer considered as a “research” laboratory but as a pilot of the final repository for radioactive high level waste. The local support was reinforced by the law: from 10M€ to 20 M€/year/GIP.

³ Loi n°91-1381 du 30 décembre 1991 relative aux recherches sur la gestion des déchets radioactifs



At the end of 2006, the cumulative amount of the contribution of the nuclear industry represented approximately 180 M€.

On condition that there is an authorization by a decree, the construction of a geological waste disposal facility with an operation period of approximately 100 years would begin from **2015, with the operation phase starting in about 2025.**

3.2. Economic opportunities directly associated with the construction and operation of the laboratory and future disposal

Today - construction and operation of the laboratory

The construction and operation of the laboratory involves 282 people (in May 2008), that is:

- Andra's staff, composed by mainly at researchers, experts and managers: 63 employees.
- Operation and maintenance: 75 people
- Scientific contractors: 20 people
- Building workers: 50 people
- Operation and security workers: 74 people.

At the end of 2007, 88% of the employees (Andra's staff and contractors) lived close to the laboratory (30 km around), of whom 75 % classed the area as their permanent place of residence.

During the construction and operation phases of the disposal facility

If the decision to implement the underground disposal facility at this place is taken, the employment opportunities expected between 2017 and 2025 are in the order of 700 to 1000 employees for the construction of the first surface and underground installations.

After the starting of operation (around 2025), 1000-1200 employments would be devoted to the operation and maintenance of the disposal facility.

Taxes generated by the presence of the laboratory

In 2007, the implementation of the laboratory induced property and corporate taxes of respectively 1.2 M€ and 0.4 M€, transferred by Andra to the Meuse and Haute-Marne counties.

Local suppliers

The total amount of investment from Andra to Meuse and Haute-Marne reached 9 M€ in 2007. The number of local suppliers of both counties increased by 10% between 2004 and 2005 and by 28% between 2006 and 2007.

3.3. Public Interest Groups of Meuse and Haute-Marne

3.3.1. Creation and objectives of GIPs

Referring to the French law of 31 December 1991 and reinforced by the planning act of 28 June 2006, territories hosting an underground research laboratory have the possibility to benefit from economic development measures. One measure is the payment of a fixed amount of money by the waste producers to the counties where the laboratory is implemented.

In order to better allocate the monetary funds, two “public-interest groups” (GIP) where created:

- GIP for Meuse county according to a constituting convention which was approved by an order of May 25th, 2000.
- GIP for Haute-Marne county according to a constituting convention which was approved by an order of August 16th, 2000.

According to the law, the objectives of these public-interest groups are:

- To manage any equipment designed to favour or facilitate the implementation and operation of the underground laboratory
- To perform, within the boundaries of the relevant county, any regional or economic development actions, particularly in the proximity zone of the underground laboratory, the perimeter of which has been set by decree after consultation with the relevant general councils
- To support training initiatives as well as actions relating to the development, including business-wise, and diffusion of scientific and technological knowledge, notably in the fields investigated within the underground laboratory and in the framework of new energy technologies

The duration of the agreement for the GIP was 3 years after the end of the research programme defined by law of 1991 and pursued by the planning act of 2006 (that is till December 31, 2009).

3.3.2. Structure of the GIP

Each GIP is chaired by the President of the General Council and managed by a Director.

Governing board

Each GIP has a Governing Board whose members serve 3 year terms. The Board includes:

- The President of the Governing Board (President of General Council)
- Representatives of State/Government
- The President of regional council
- Representatives of 15 local town Mayors (10 Km around the main shaft)
- Representatives of ANDRA



- Representatives of EDF
- Two county councillors designated by members of the general meeting
- Representatives of the communities of municipalities within the proximity zone

General Assembly

The General Assembly, which is the place where decisions are made on actions to implement or to pursue, is composed of all members of the group or their designated representative. All the members are invited by the Chairman of the Board at least once a year on a specific agenda. The General Assembly is constituted as outlined below :

- Regional Council (10 votes)
- General Council (100 votes)
- Municipalities which are situated in the proximity zone (1 vote for each municipality)
- Agricultural chamber (1 vote)
- Commercial and industrial chamber (1 vote)
- Chamber of trades (1 vote)
- ANDRA (10 votes)
- EDF, AREVA, CEA (10 votes for each waste producer)
- Representatives of community of communes (1 vote for each municipality)

It has to be noted that the presence of waste producers is a recent event. Before the planning act of June 2006 they were not represented in the GIPs.

Executive Committee

The Executive Committee is responsible for reviewing the files handled by the competent services.

The Committee takes decisions on the different requests presented by each member (each member has one vote). In the case of disagreement, the vote of the President of the Governing Board shall be predominant.

The structure of the Executive Committee is :

- The President of the Governing Board (predominant vote)
- Representative of State (1 vote)
- Representatives of the General Council of Meuse and Haute-Marne (1 vote for each representative)
- Representative of the Community of municipalities (1 vote)

The daily functioning of the GIP is ensured by 6 permanent employees.

3.3.3. Financial support for the GIP

From 2000 to 2006

During the first period corresponding to the 1991 law, around 10 M€ were dedicated to each GIP per year. This amount was decided in comparison with the benefits which could be brought by a nuclear power plant if it was implemented in the County (i.e 9 M€), plus the corporate tax potentially generated by the laboratory when it will be



operated (i.e. 1 M€)

This support was paid by the waste producers (EDF, AREVA, CEA) proportionally to the volume of waste they were producing, i.e: 78% by EDF, 17% by CEA, 5% by AREVA. These sums were paid by the producers to Andra which transferred them to the GIPs.

Since the planning act of June 2006,

With the new law of 2006, the GIPs receive funds from the French State. These funds come from two taxes paid by the waste producers to the State. The level of this tax is decided each year by the French government. Until now, around 20 M€/year are allocated to each GIP. This sum could evolve in time to a maximum of 30 M€/year/GIP.

Among these 20 M€, 11 M€ come from the “outreach tax” which aims at financing actions favouring and facilitating installation and operation of the laboratory and repository and actions linked with territory development, economic development especially concerning the proximity zone. The « outreach tax » includes direct allocations which have to be distributed to municipalities within the proximity zone for a total of 1.5 M€ (see below).

The remaining 9 M€ come from the “Technological diffusion tax” dedicated to finance actions in favour of development and diffusion of scientific and technological skills, projects of industrialists and actions linked with training.

Specificity of the proximity zone

The « proximity zone » is a circular perimeter of 10 Km around the laboratory entry point. This specific area contains 15 municipalities.

20% of the total support given to the GIPs has to be spent in the relevant municipalities located totally or in part within the proximity zone. Till 2006, the municipalities benefiting from this direct support could propose their own projects to the GIP (for instance improving their water supply, implementing sanitation projects...). Since 2007, the municipalities situated in the proximity zone receive from the GIP an annual allocation of approximately 400 €/inhabitant/year and are free to use it as they choose. In addition, the GIP proposes specific projects to which the communities of municipalities can apply.

Perspective with the counties’ budget

The budget of the general council of Haute-Marne and Meuse reached respectively 209 M€ and 265.35 M€ in 2008⁴. The budget dedicated to actions of development of Meuse (investment budget) has increased by 50% between 2004 and 2008 to reach 81 M€ in 2008. The investment budget of Haute-Marne represented 71 M€ in 2008. This budget integrates the financial support received by the GIP.

⁴ Cf. Website of General Council of Haute-Marne, Meuse, Haute Loire and Lot



It is interesting to compare this information with the respective total budget and budget related to investment of other counties which have approximately the same population. For instance, the counties of Lot and Haute-Loire, which have a total population of respectively 176021 and 227741 inhabitants, received for 2008 a total budget of 225 M€ of which an investment budget of 45.2 M€ and for Haute-Loire a total budget for 2009 of 239 M€ of which the investment budget is 38.68 M€. It can then be noticed that the counties of Haute-Marne and Meuse have approximately the same total budget allocated but their budget dedicated to investment is practically twice the budget of other counties with an equivalent population. This difference is partly due to the fact that the resources of the GIP (20M€) are taken into account in the budget of the General Council of Meuse and Haute-Marne.⁵

3.3.4. Actions supported by the GIP

The implementation of economic development actions managed by the GIPs is guided by a long-term vision of development adopted by General Assembly. This vision has 4 major areas:

- Promoting economic development and employment in Meuse and Haute-Marne counties:
 - Supporting enterprise creation, modernization, innovation and development projects
 - Contributing to improving enterprises and the environment
 - Supporting emerging activities notably with new energies
 - Favouring employment access
 - Support EDF, AREVA and CEA projects
- Supporting local development
 - Environment and surroundings
 - Accommodation
 - Public utilities restructuring and human services
- Structuring living departmental spaces
 - Supporting investments linked with centers of economic activities (like road facilities...)
 - Supporting communications (High speed Internet,...)
 - Control of energy demand
- Supporting tourism activities and county reputation
 - Supporting major tourist facilities

⁵ « *Journal du CG Haute Marne ligne directe* », May/June 2008.

3.3.5. Direct beneficiaries of economical support

The economic actors likely to benefit from this economic support are:

- Firms and Enterprise groups
- Local authorities and local state-owned companies
- Associations and consular organisations
- The societies of mixed economy
- The individuals
- Social housing organisations
- Other organisations that contribute towards local economic development

3.3.6. Feedback experience of GIPs

The objectives of providing a financial support to the region, counties and municipalities, as presented by the waste producers, are to facilitate acceptance of an eventual disposal facility in the territories around Bure, to prepare territories for stakes linked to the creation of the disposal facility and to give value to this waste disposal project.

The GIPs present many advantages for the management and allocation of the financial support. These structures are autonomous, governed by local people and with the objective to respond directly to local expectations.

The GIPs' organisation and structure issues

Nevertheless, it has to be noted that some difficulties can emerge. In the one hand, even if this structure is an autonomous one, it represents a heavy administrative structure. In fact, GIPs are a part of General Councils, so it seems to be difficult for them to go against the decisions or orientations of these Councils. On the other hand, the public funds (like the funds allocated to GIPs) are framed by national and European rules particularly concerning public assistance for enterprises. One of the main objectives of GIP is to promote employment in the territories hosting the laboratory, but it is not possible to invest public funds directly into private firms.

Local (proximity zone) development issues

This development linked with the future waste disposal should be a means to create employment in the territory within the proximity zone in order to maintain life around the site. However, as the funds benefit the whole counties, a lot of investment projects have impacts in the main urban areas, which are far away from the laboratory. Some local actors deplore this situation.

In some communities in the municipalities, it appeared that one part of the municipalities were part of the proximity zone and others were not. This situation has, in some cases generated tensions, competition phenomena between the municipalities, situated within the proximity zone and benefiting from direct compensations of the GIP,

and the municipalities beyond the zone that do not receive this amount of money.

The allocation dedicated to the municipalities of the proximity zone is now dependant on the number of inhabitants (400€/inhabitant). This situation creates discrepancies in terms of financial investment capacities between the highest populated communities and the lowest populated ones. Moreover, since the setting up of this allocation, it appears, from the point of view of local actors, that there is a trend from General Councils and county services to decrease in parallel their financial support to the municipalities belonging to the proximity zone. This situation would not create a strong problem for a municipality of 1000 inhabitants but may impede a municipality of 50-100 inhabitants which can not use the direct allocation for important investments.

Identification of potential economic development projects

It is noted by local elected people that there is a lack of technical skill for small municipalities to come up with ideas for development projects as it is claimed by the GIP. It could be useful for municipalities to collaborate with an expert in development of territorial projects, independently of the proposals of the GIP and General council. Besides, projects proposed by the GIPs do not correspond to local expectations. In fact, a grand part of the projects proposed are focused on the main attractiveness of the region, i.e. historic tourism linked with the 1st World War whereas small municipalities would need projects linked with improvement of living conditions (sanitary projects,...).

3.3.7. Potential improvement of the GIPs functioning

In order to reinforce the confidence in the functioning of the GIPs, some stakeholders wish that an external authority made a regular audit of these structures. This external authority could be mandated by DGEC (General directorate for energy and raw materials belonging to the Ministry of Environment) or by the regional court of account.

In order to fully satisfy the initial tasks of the GIPs, a degree of autonomy should be granted from General Councils and local municipalities.

It is important to give credibility and publicity to the projects financed by the GIP. The creation and use of the logo "economic development" supports⁶, even if, in certain cases, it is perceived by some people as a negative image (project linked with radioactive waste disposal).

⁶ A logo « Economic development of Bure laboratory » was created in 2007 in partnership between, GIPs, General councils and waste producers

3.4. Specific actions implemented by the radioactive waste producers EDF, AREVA and CEA

Since 1994, with special emphasis since 2000's, in addition to projects financed by the GIPs, radioactive waste producers like EDF, CEA and AREVA launched specific actions, in partnership with local actors in order to improve the economic activity and employment in this territory.

3.4.1. Creation of High Level Committee

In 2005, the French government decided to create a High Level Committee. This Committee is a means for the government to reinforce the efficiency of the economic development around the Bure site and to urge industrials (EDF, CEA, AREVA) to develop several projects in these territories and specifically the municipalities within the "proximity zone".

The Committee is chaired by the Minister for Ecology, sustainable development and spatial planning (which included the division for nuclear affairs). It is composed of:

- Representatives of DRIRE (Regional directorate for industry, research and environment)
- Prefects of 2 counties
- MP of Meuse and Haute-Marne
- Presidents of General Councils
- Presidents of waste producers (EDF, CEA, AREVA) and President of Andra
- Representatives of BRGM ("Bureau de recherches géologiques et minières », Geological Survey Institute)

The Committee meets 2 times per year to check the actions undertaken by the waste producers and to give orientations for the projects to be developed.

3.4.2. Program of economic development set up by nuclear industry

The three waste producers have adopted common guidelines for the economic support program, and each of them has selected its own actions in coordination and consistency with the other partners. A partnership was formed between them, the General Councils and the GIPs in order to lead complementary and mutual actions. The objective of this program is to combine the know-how of the industry (very low energy emitting greenhouse gases) with the resources, skills and ambitions of the territories (agricultural, forestry, metallurgy...). The program of economic development set up by EDF, CEA and AREVA is divided into 4 themes:

- "Biomass" which aims at encouraging the use of local agricultural and forestry resources in order to promote biomass and to produce biofuels, firewood, or

electricity by gasification of the wood:

- First-generation biofuel: AREVA has brought support to this project with the realization of preliminary process studies for extension of a project concerning production of biodiesel made from vegetable oil.
 - Second-generation biofuel: CEA manages the creation of a semi-industrial unit for gasification of the wood for the production of fuels.
 - Production of electricity and heat from wood gasification: EDF manages this project.
 - Support to the structuring of the wood industry: in order to characterise available wooden resource and conditions of its mobilisation (quantity, quality, cost), AREVA initiated several studies since 2005 with the professionals of the wood industry. These studies allowed the three waste producers to propose actions to counties, professional organisations and consular rooms, to support the development of forestry and development of new energy cultures.
- "Control of Energy Demand" which aims at making Haute-Marne and Meuse counties of excellence in energy savings by working on the performance of buildings and by accompanying the artisans and the small and medium enterprises (SMEs) in this field:
- EDF committed to introduce a policy contributing to the national effort to control energy demand and to reduce CO₂ emissions in buildings. EDF has two main objectives: to be more efficient in terms of energy saving in individual dwellings, public service sector and to propose more dynamic services to help the artisans and SMEs of both counties in order to create jobs. This plan, led in partnership with general instructions and professional organisations of Meuse and Haute Marne represents for EDF a contribution of 20 M€ over 2006/2010 period.
 - Concrete example: 0-interest loans for 3 to 10 years dedicated to investments linked with energy saving
 - Objective: intercede with 5500 private individuals in 5 years
 - To make Haute-Marne a pilot-territory of energy saving
- "Purchase reinforcement" which intends to develop partnerships with local firms of the territory likely to become intended suppliers.
- In this framework, the industrials support the industrial fabric with the establishment of an association grouping local enterprises (association Energic sous-traitance 52/55") becoming favoured suppliers for the nuclear industry
- "Creation and development of firms" which proposes a financial support to SMEs, establishment of some activities of the group EDF on the counties of Meuse and of Haute - Marne, and the support to the founding plans of local authorities.
- Concrete example: creation of a Technopark (AREVA) or industrial records (EDF) which could represent a job potential of respectively 10 and 15 jobs.
 - 254 jobs were supported by EDF in 9 firms thanks to premium of loans and loans.

3.4.3. Reflections about the economic development

From the industry's point of view, the main objective of the whole economic development system does not correspond to an application of the polluter-payer principle because neither the laboratory nor the waste disposal facility are sources of pollution. It is more a question of developing public support for the laboratory and the future disposal facility and to compensate the modifications due to the implementation of an industry in a rural area.

The several issues determined by the waste producer are linked with the fact that the characterisation of the site has not been defined, and that there is not yet waste. Officially the decision on the location of the final waste disposal facility is not taken so it represents a hindrance to elaboration of long-term projects. Another difficulty to plan long-term actions is induced by frequent political changes due to local elections. So in order to overcome this difficulty and to plan sustainable actions, it is necessary to work in partnership between the nuclear industry and the local elected people on the fundamentals of the territories.

The waste producers are confronted with different problems for the implementation of new actions in the territories. On one hand, in order to set up new enterprises within the proximity zone, nuclear industry needs land. However, the majority of territories close to Bure are agricultural land, so it is difficult to convince landowners to sell their plot. On the other hand, the producers were urged to develop their activities close to the laboratory, but the local population does not have the necessary competence to apply for the jobs proposed. In view of this situation, nuclear industry favours internal transfer of their actual staff, which would involve them moving into the local population.

4. PRELIMINARY REFLECTIONS ON SUSTAINABLE TERRITORIAL DEVELOPMENT

4.1. Economic development: a key element for ensuring a sustainable vigilance

According to the long-term dimension, it would be necessary to sustain economic and social life in the vicinity of the waste facility in order to maintain vigilance. Economic development is a key element for ensuring a sustainable vigilance and transparency on radioactive waste installation and has to be elaborated on the basis of local initiatives and involvement of territorial actors.

To ensure this local economic development, it is important to develop territorial projects linked with the national and/or international development framework.

The additional economic measures associated with the RW installations have to be considered in articulation with the classical local economic development processes. It would be necessary to adapt the economic support with time according to the different

steps of disposal creation that is research/design, operation and long-term surveillance, these different steps involving directly more or less population on the site.

The economic issues should be addressed in parallel with risk and protection issues. A reflection in terms of risk-benefit analysis has to be engaged.

4.2. Setting up partnerships

Ensuring an economic and social life depends not only on economic measures but on sustainable economic activities creating employment. Economic development will largely depend on the capacity to set up partnership with industrialists and elected people on the fundamentals of territories. This partnership with nuclear industries would be in articulation with the issue of “National Solidarity” with the hosting territory but has to be addressed carefully taking into consideration the role of the local stakeholders in the decision-making process.

In some cases, it could be difficult to link activities proposed by the waste producers with the local competences. Therefore a reflection has to be engaged concerning specific actions on local populations training.

4.3. Benefit package and selection process

Economic development is the key driver to preserve life on the vicinity of the site but it doesn't have to replace the democratic decision-making process related to radioactive waste management.

It would be necessary to consider carefully the problem of competitiveness between territories which are candidates for hosting a radioactive waste installation due to interest in the associated economic development.

4.4. Dedicated structure for economic development

The advantages of creating an autonomous structure dedicated to funds management which respond directly to local expectation, giving significant room to local actors. Because of its autonomy from different type of actors (elected people, industrials...), this structure would have the possibility to respond exclusively to the objective of sustainable development of territories. To respect this objective, an audit process would be necessary for ensuring that the funds are used adequately.

Taking into account the complexity of the situation and the objective to favour economic development, there is a need to introduce flexibility in the traditional rules concerning the management of public funds.

4.5. Conditions of success

The conditions for favouring successful development are related to the setting up of actions prevailing economic development, the organisation of long-term surveillance and vigilance with in parallel an efficient democratic process and a real political engagement.

APPENDIX 1. Geographical location of Bure laboratory

