

A WELL-TRAINED, COMPETITIVE WORK FORCE

Bac Pro (vocational school leaving certificate)	Maintenance technician for energy and heating/cooling systems (Lycée Professionnel du Bâtiment in Montigny-les-Metz)
Bac Pro (vocational school leaving certificate)	Nuclear industry maintenance (Lycée La Malgrange in Thionville)
Bac STI (industrial school leaving certificate)	Energy engineering (Lycée Gustave Eiffel in Talange)
BTS ("higher national")	Fluids, Energies, Environments – specialising in thermal installations and air-conditioning (Lycée Gustave Eiffel in Talange)
BTS ("higher national")	Radioprotection (Lycée La Malgrange in Thionville)
DUT - Level III (university diploma)	Physical measurements / Mechanical and production engineering / Industrial engineering and maintenance / Quality, industrial logistics and organisation / Thermal engineering and energy / Science and engineering of materials
Vocational degree in "Management of energy resources and renewable energies"	Existing since 2009, by the Institute of Technology (IUT) specialising in Physical Measurements. 55% of lectures are given by ADEME professionals
Vocational degree in "Heating/cooling engineering and industrial cold"	Institute of Technology (IUT) in Thionville
Vocational degree in "Energy, the environment and sustainable development"	Lycée Gustave Eiffel in Talange
SUPELEC - College of Electrical Engineering	Specialist Master's degree for business engineers working in the new energy markets
ENIM - Metz National College of Engineering	Engineering courses with specialisation in thermal energies. Project for a new specialisation in bioenergies

TECHNOLOGICAL RESOURCES

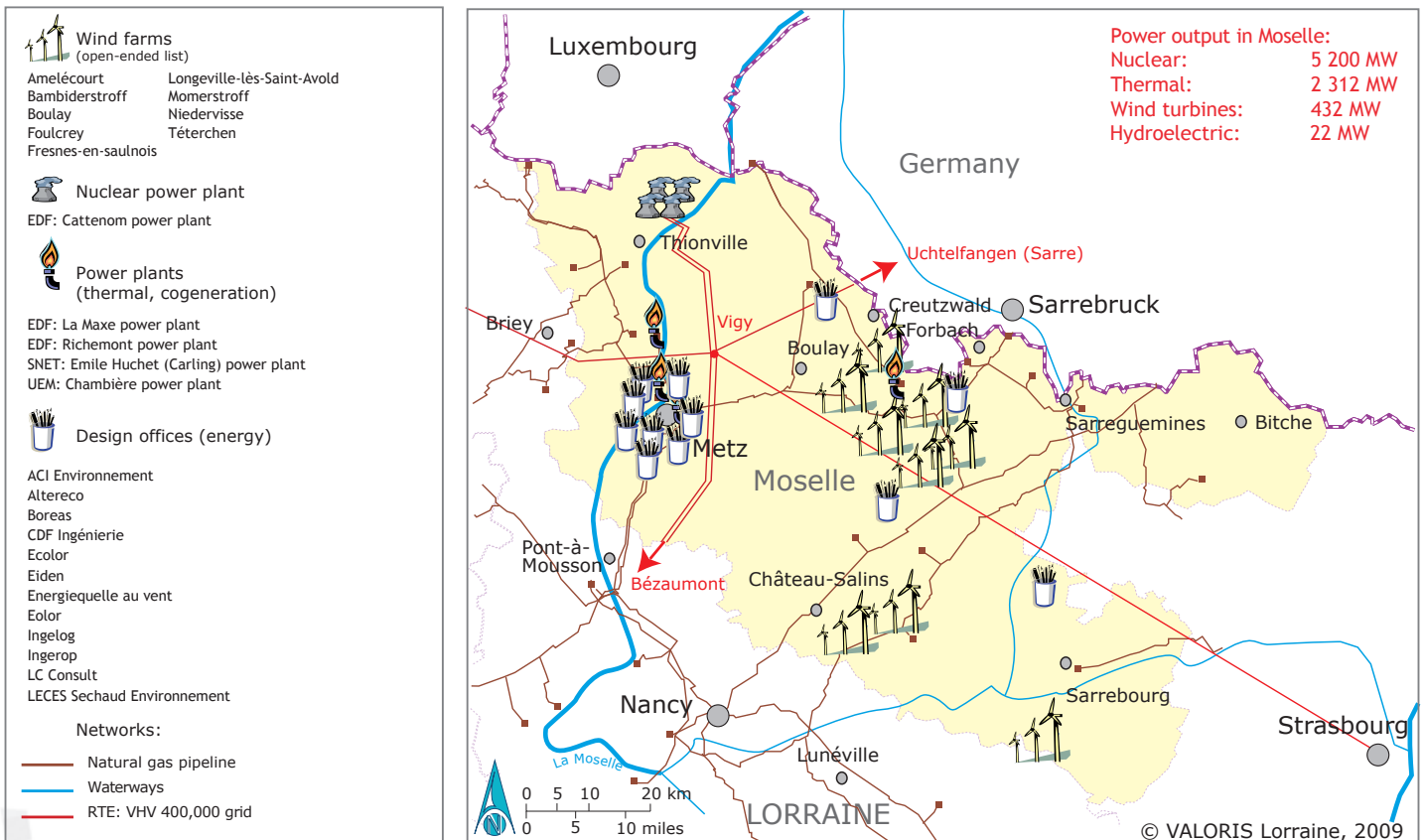
ALPHEA	Forbach	Centre of excellence in hydrogen and fuel cells
Lorraine's windfarm technology cluster: industrial contracting for the manufacture of wind turbines	Nancy	20 industrial companies and technical centres in Lorraine have regrouped within the windfarm technology cluster. Their knowledge covers the manufacture of all wind turbine components, from boilermaking to the production of pinions, generators and composite plastic components (e.g. Pôle de Plasturgie de l'Est: development of the filament winding technique for turbine blades).
GIM EST (Eastern France Maintenance Industry Federation)	Thionville	GIM Est brings together nuclear maintenance companies from all over the north-east of France. Thanks to its representative nature and a membership of more than 41 companies, the association is a powerful lobby group.

MOSELLE HAS PLENTY OF ENERGY!

KEY FIGURES FOR THE SECTOR IN LORRAINE

- Lorraine is France's leading region for installed wind power. The sector produced 3,476 MW in France at the end of 2008, 432 MW of it in Lorraine. In July 2008, there were 69 wind turbines in Moselle. (source : Observatoire des territoires)
- With a record budget of 22 million euros to support renewable energies over 5 years (+10 million euros from the EU), Lorraine is right at the top of the country's list:
 - 1st for geothermal
 - 2nd for photovoltaic cells
 - 1st for the recovery of rainwater
 - 2nd for the production of solar energy.
- Moselle is one of France's leading départements for the production of electricity (nuclear, coal, gas, hydroelectric) and bioenergies. It is through Moselle that France receives gas from Russia and the industrial gas distribution network is unique.

ENERGY IN MOSELLE



MOSELLE ATTRACTS ENERGY-RELATED BUSINESSES

- **DIRECT ENERGIE** is setting up a combined cycle natural gas plant with a capacity of 800 megawatts in Europôle 2 in Hambach, an investment of 550 million euros.
- **SNET (EON Group)** in Carling has begun construction, in the Emile Huchet plant in Carling, of two combined cycle gas projects that will produce 860 MW, an investment of 470 million euros.
- **TOTAL** and **GDF SUEZ** are investing 70 million euros in a silicon plate production plant to supply the photovoltaic industry, in the Composite Park in the East of Moselle.
- **ARCELOR MITTAL's** site in Florange has been chosen for the European ULCOS research project (Ultra low CO₂ steelmaking) focussing on the storage and capture of CO₂. The process, which aims to halve the CO₂ emissions resulting from steelmaking, requires an investment of 400 to 500 million euros.
- **THE POWER STATION IN METZ** will be producing one of the largest biomass power plants in France, in Metz, fed by timber from the forest within a 100 km radius around the city. 59% of the urban heating system will then function without burning fossil fuels.



A VISSMANN hot water tank, made in Faulquemont



SIH (Société Industrielle du Haras) is the only company in France to have developed a combined system of lighting and fire safety by removing the greenhouse effect.



Renewable energies packed in a volume of 543 m³: REHAU has used it supplies to the construction of geothermal, Canadian water low-temperature heating panels, obscure double recovery, all in a low-carbon

NUMEROUS INDUSTRIAL STAKEHOLDERS



Stefan R. Girschik, Chief Executive Officer, REHAU Western Europe, member of the Steering Committee, said, "As the creator of infinite polymer system, REHAU is a world leader in the development of complete, reliable systems for three sectors of activity – construction, automotive and industry. Some 15,000 employees worldwide work to develop complete systems customised to meet customer requirements and preserve the environment. Thanks to the quality of its innovations, the high level of technology in its production systems and the flexibility of its logistics, this independent family company set up more than 60 years ago has strengthened its reputation as a forward-looking, reliable partner. Since its restructuring and the setting up of 8 regions within the group, Morhange, a town in the centre of Moselle, has been the headquarters for Western Europe i.e. France, Belgium, the Netherlands, Luxembourg, Switzerland and North African countries. In 2009, REHAU is celebrating the 50th anniversary of its operations in France".

- STIEBEL ELTRON, Germany's leading geothermal equipment manufacturer (aerothermal, vertical and horizontal geothermal) has set up its assembly plant for the French market in Metz. It employs 50 people and also distributes products to Belgium and Luxembourg.
 - The SCHNEIDER ELECTRIC group manufactures transformers through its France Transfo subsidiary in Maizières-les-Metz and low-voltage electrical switchboards in its Sarel subsidiary in Sarrebourg. The switchboards are integrated into wind farms and solar equipment.
 - The Danish GRUNDFOS group in Longeville-les-St-Avold produces pumps for heat pump systems.
 - The VISSMANN plant in Faulquemont is one of the German group's leading plants, and Europe's leading boilermaking company. More than 600 people are employed there, manufacturing hot water tanks and, since 2007, thermal solar panels.
 - France's largest measurement and instrumentation companies are also to be found in Moselle - JUMO REGULATION, THERMO EST, PROSENSOR etc.
- Numerous other companies involved in metrology and heat engineering operate from Moselle.

... into an area
... all the systems
... market e.g.
... cell, heat pump,
... /cooling floors, solar
... glazing and rainwater
... consumption building.