

05.

FROM RESEARCH TO INDUSTRY





IFP ENERGIES NOUVELLES' ECONOMIC MODEL IS BASED ON THE INDUSTRIAL DEVELOPMENT OF ITS RESEARCH RESULTS.

It thus ensures transfer between fundamental research, industrial research and innovation.

This transfer from the laboratory to industry takes the form of industrial partnerships, the creation of subsidiaries or shareholdings and support for innovative young companies. Through all these actions, IFP Energies nouvelles helps create wealth and jobs in the energy, transport and environment sectors.

70 PARTNER OF INDUSTRY

71 CREATION OF BENCHMARK INDUSTRIAL PLAYERS

76 SUPPORTING INNOVATIVE COMPANIES

In partnership with D2T, IFP Energies nouvelles is continuing work on the development of the Morphée 2 engine test bench supervision platform.



PARTNER OF INDUSTRY

Creating value

The influence and reputation of the companies created or supported by IFP Energies nouvelles, including Axens, Beicip-Franlab, Coflexip, Technip, etc., illustrate the success of its development policy as a creator of wealth and jobs.

IFP Energies nouvelles nurtures relationships with major industrial players within research or business partnerships on an international scale.

COLLABORATIVE RESEARCH

Bilateral research contracts involve IFP Energies nouvelles and its partner jointly funding a research project and defining rules relating to ownership of the results. IFP Energies nouvelles works with over a hundred industrial partners in France or internationally. In the field of oil and gas production hoses, IFP Energies nouvelles has been working in partnership with Technip for a number of years.

Research consortiums bring together several partners, who pool their resources and expertise. More often than not, in basic research, the results are shared between the partners at the end of the project.

Joint Industry Projects (JIP) are a specific type of consortium, mainly concerning exploration and production-related activities. IFP Energies nouvelles operates the R&D program alone. On completion of the project, the companies use the results, but IFP Energies

nouvelles retains industrial ownership. Around five new JIPs are created every year.

Another form of collaborative research has recently emerged: research demonstrators. These differ from consortiums and JIPs in terms of the magnitude of the resources deployed. The last step in the validation of a technology prior to its industrialization, research demonstrators are closely linked to the emergence of new energy technologies. The technical complexity of NET-related projects and the associated financial stakes make working together essential, in order to validate a complete technological chain rather than a single isolated technology. This new type of collaborative research brings together R&D players like IFP Energies nouvelles with industrial players familiar with research demonstrators of this type, keen to conduct experimental development work. One example of this is the *France Nord* project for CO₂ transport and storage, selected by Ademe in 2010. In the 2nd-generation biofuels sector, the Futuro1 project launched in 2008 and the BioTfuel project begun in 2010 are exploring biological and thermochemical processes, respectively.

“ THE INDUSTRIAL COMPANIES SUPPORTED BY IFP ENERGIES NOUVELLES ARE IMPORTANT TECHNOLOGY TRANSFER LINKS.”



Éric Lafargue
Industrial Development
Business Unit

Finally, IFP Energies nouvelles is involved in numerous competitiveness clusters. Created by the public authorities to strengthen the role played by regions in research, competitiveness clusters bring together companies, higher education institutions and research bodies on the same site, working as partners on innovative projects.

BUSINESS PARTNERSHIPS

IFP Energies nouvelles' innovations can give rise to licensing out operations, as is the case with the ClipRiser®, for example, a breech-block types connector system designed for drill pipes, developed by IFP Energies nouvelles and marketed by Aker Drilling Risers.

They may also lead to joint offers: in 2009, IFP Energies nouvelles, Beicip-Franlab and Rhodia launched a joint services and consulting offer targeting chemical-enhanced oil recovery activities for the petroleum industry.

AN INTERNATIONAL REACH

All the partnerships developed by IFP Energies nouvelles with industry are implemented on a global scale. These partnerships are most numerous in its traditional sectors of activity. They involve oil, gas and related companies, motor vehicle manufacturers and equipment suppliers, etc. However, the number of partnerships in the new energy technologies sector is growing significantly.

The training activities of IFP School and IFP Training play an essential role in these business relationships. By training high-potential employees in foreign companies, they help to forge strong ties with the people destined to become the future industrial and political elite in their own countries.

45%

of IFP Energies nouvelles' resources come from the industrial development of its research.

CREATION OF BENCHMARK INDUSTRIAL PLAYERS

To develop the results of its activities and in accordance with its memorandum and articles of association, IFP Energies nouvelles creates companies or acquires stakeholdings in companies that serve as technology transfer links in its fields of activity. The objective is to make them benchmark players.

AXENS: CATALYTIC PROCESSES, REFINING AND PETROCHEMICALS

Created by IFP Energies nouvelles in 2001, Axens has become a key player in the supply of refining

technologies and catalysts, particularly for the production of clean fuels. In particular, the company markets processes for catalytic cracking gasoline desulfurization (Prime-G+™) and aromatic treatment.

EURECAT: CATALYST REGENERATION AND CONDITIONING

A subsidiary jointly owned with the American chemical group Albemarle, Eurecat is a service company operating primarily in the refining industry. It is a leading provider of catalyst regeneration and conditioning services.

ClipRiser®, developed by IFP Energies nouvelles, reduces the connection time of offshore drilling risers.





S-Oil Corporation (South Korea) opted for Axens' Paramax® technological suite for its Onsan refinery.

HEURTEY PETROCHEM: REFINING FURNACE ENGINEERING, PETROCHEMICALS AND HYDROGEN PRODUCTION

IFP Energies nouvelles is the reference shareholder in Heurtey Petrochem, one of the leading suppliers of process furnaces for hydrocarbon conversion and hydrogen production. Heurtey Petrochem's expertise extends from feasibility studies to the completion of turnkey projects.

PROSERNAT: NATURAL GAS TREATMENT ENGINEERING

After years of R&D cooperation with IFP Energies nouvelles and Total, Prosernat has become one of the leading providers of natural gas sweetening licenses. The company is also an important player in the gas drying unit market. Prosernat and IFP Energies nouvelles have recently extended their partnership to include CO₂ capture technologies.

GEOGREEN: CO₂ TRANSPORT AND GEOLOGICAL STORAGE ENGINEERING

Created in 2007 by IFP Energies nouvelles, Géostock (underground hydrocarbon storage) and BRGM, Geogreen is an engineering service company dedicated to CO₂ transport and geological storage. It offers industry a broad range of services, from upstream expertise to engineering and project development.

RSI: PROCESS SIMULATION FOR THE OIL INDUSTRY

The world-renowned RSI group provides process simulation solutions for the oil industry, the LNG supply chain and the refining and petrochemicals industry.

D2T: POWERTRAIN ENGINEERING

D2T specializes in the engineering and marketing of testing resources for engines and powertrains. An internationally recognized player in test bench automation, D2T operates in Europe, the United States and Asia.

BEICIP-FRANLAB: GEOSCIENCES CONSULTING AND SOFTWARE FOR THE OIL AND GAS INDUSTRY

A consultancy and research company, Beicip-Franlab markets the geosciences software developed by IFP Energies nouvelles for the oil and gas industry. The company operates in over 100 countries on behalf of more than 500 oil companies or institutions. Its hydrocarbon reservoir modeling and simulation software solutions are world references.

TECH'ADVANTAGE: A SOFTWARE ENGINEERING AND SERVICES COMPANY SERVING THE ENERGY SECTOR

Founded in 1992, Tech'Advantage has developed expertise in the field of software architecture, modeling, 3D visualization, scientific computation and internet technologies acquired in the industrial development of IFP Energies nouvelles' R&D software.

IFP TECHNOLOGIES (CANADA): DEVELOPMENT OF EXPLORATION-PRODUCTION AND ENVIRONMENTAL TECHNOLOGIES

The mission of this subsidiary is to develop IFP Energies nouvelles' R&D results in Canada in the fields of exploration-production and the environment.

IFP TRAINING: A PROFESSIONAL TRAINING PLAYER

Along with IFP School, IFP Training fulfills IFP Energies nouvelles' statutory training mission. It has around a hundred teaching staff, who, every year, train almost 15,000 technicians, managers and future leaders in the oil and gas, petrochemical-chemical and automobile industries.

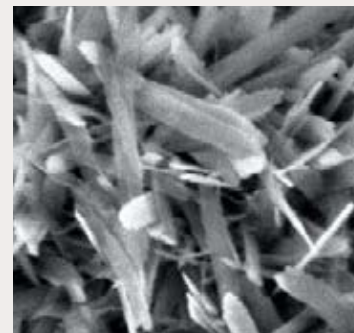


Training is a major vector for competitiveness.

FOCUS ON...

ACTIVATED ALUMINA

DEVELOPMENT Axens took over the activated alumina business belonging to the Rio Tinto Alcan group, located in Brockville (Ontario, Canada) in 2010. Activated alumina is used for its adsorbent properties and in certain types of catalysis. This acquisition reinforces Axens' position on two world markets in the fields of polyethylene purification and water treatment.



QUESTIONS TO...

Patrick Sarrazin

Director Adsorbents and Claus Department, Axens



Why did you choose the Brockville plant?

P.S.: For complementarity reasons, in terms of both products and geographic position. The Brockville plant offers recognized expertise and occupies a leading position in the polyethylene purification sector, where Axens was no longer present. We had previously focused our activated alumina business mainly on gas purification, air drying and Claus catalysis, an operation that consists in recovering sulfur during natural gas production or oil refining.

This acquisition makes us a major player for adsorbents and Claus catalysis. What's more, its geographic location means that the Brockville plant is ideally placed to supply the North American market, where Axens has a lower-profile presence for this type of product. We have therefore created a subsidiary, based in Canada, Axens Canada Specialty Aluminas Inc., which now operates the Brockville plant.

Will the plant's water treatment-related activities also be useful to Axens?

P.S.: Absolutely. This is a booming market that we have not previously targeted. The first application is cleaning up water that has been contaminated by heavy metals. This might involve storm water collected at industrial sites or water from old mines. The Brockville plant has developed and patented very high-performance products for carrying out these operations. For the time being, this is a

predominantly North American issue, since the regulations there are further ahead. But it is now increasingly relevant in Asia and Europe. The potential commercial opportunities are therefore significant. The other application concerns drinking water, which can contain fluorides or arsenic. Once again, the Brockville plant possesses products adapted to these specific treatments. Like the previous one, this is also a global market. As a matter of interest, the plant has French customers.



2010 HIGHLIGHTS

Axens

In an economic climate that remains difficult, sales of products and services have continued to grow. In particular, Axens has signed a number of technology license contracts in Asia, the Middle-East and Latin America, where there is a growing demand for fuels and chemical products. Two new processes have been brought to market: AlphaHexol® (production of 1-hexene from ethylene) and FlexEne (increase in propylene and gas oil yield of catalytic cracking). The Vegan™ process (production of biofuels by hydrotreatment of vegetable oils) is currently undergoing validation for market launch in 2011. The catalyst and adsorbent portfolio has also been enhanced with, in particular, new hydrocracking catalysts. Finally, the acquisition of the activated alumina business belonging to Rio Tinto Alcan (Brockville factory) has reinforced Axens' position in this sector.

**Eurecat**

2010 was marked by sustained growth of Eurecat's business in the USA. The acquisition of a new catalytic microtest unit in the La Voulte laboratory (Ardèche region) has made Eurecat a reference in the field. A partnership deal was also signed with Tricat to market the latter's sulfurization technology



in Europe. Finally, a cooperation agreement relating to used catalyst recycling was signed with the Eramet group's Valdi and GCMC subsidiaries.

Heurtey Petrochem

The group's business, driven primarily by emerging countries, began to grow again in 2010. Thanks to the development of its local subsidiary, Heurtey Petrochem is now a major refining market player in India. The Indian state-owned company IOCL has ordered several batches of furnaces from the company for its new refinery being constructed in the east of the country. In the Middle-East, the Ruwais refinery extension project in Abu Dhabi has also been of benefit to Heurtey Petrochem. In Russia, a contract was signed for the supply of two furnaces intended for the Khabarovsk Refinery, a subsidiary of the Alliance Oil Company. Finally, several turnkey contracts were delivered in India, Greece, South Korea and Singapore.

Prosernat

2010 proved to be a difficult year for the gas market, with a fall in consumption and world production, as well as investments. Prosernat nonetheless played its game well, delivering a number of units to its international customers, including Egypt, the United Arab Emirates, Turkmenistan, Venezuela and the Yemen. In addition, a healthy order book means that business is guaranteed for 2011.

Geogreen

The company was involved in some large-scale projects, such as Manaus (Ademe), launched in October 2010 with BRGM, IFP Energies nouvelles, Ineris, Oxand and Phimeca. This one-year project aims to unify methodologies to analyze risks related to underground CO₂ storage. Furthermore, the joint study conducted with Beicip-Franlab for the Venezuelan oil operator PDVSA concerning enhanced oil and gas recovery was completed in October 2010. The first projects will be conducted in 2011 and other similar projects are currently being discussed with PDVSA. Finally, on behalf of the International Energy Agency, Geogreen conducted a feasibility study on global CO₂ capture and storage deployment targets to be achieved by 2050.

RSI

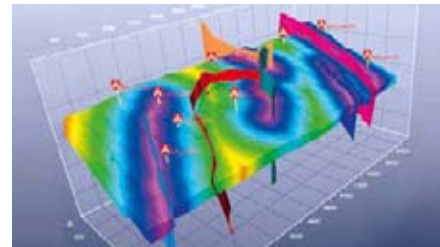
The RSI group has seen its business grow in all its markets. In addition, the takeover of HKD, the leading Chinese company in the field of process simulation for the oil, gas and petrochemicals industry, has enabled it to boost its sales in China.

D2T

The slow recovery of the automotive market – especially in Europe – has had contrasting effects on D2T's activities. The powertrain engineering sector has taken off again, particularly on customers' sites, whereas the testing resources engineering and equipment sector has shrunk. D2T has therefore shifted its focus to buoyant sectors (commissioning of a new roller bench for the calibration of conventional and hybrid engines, launch of a new simulation activity in partnership with IFP Energies nouvelles) and dynamic market zones, particularly in China, where a subsidiary has been created. Finally, a new high-frequency acquisition system was developed. This supplements the Osiris combustion analysis system.

Beicip-Franlab

The company's exploration-related activities have developed significantly, both for consulting (deep offshore in Brazil, Canada, the Gulf of Guinea, Mexico and the Middle-East) and basin software sales, which have grown substantially in comparison with 2009. A partnership agreement signed with IFP Energies nouvelles and Rhodia will lead to the three partners proposing chemical enhanced recovery services, one of the company's major growth drivers. Finally, the OpenFlow™ software



platform has been enhanced by the addition of the EasySense/Cougar™ uncertainty analysis and quantification tool, which supplements the PumaFlow™ simulator and the CondorFlow™ calibration assistance tool.

Tech'Advantage

The OpenFlowSuite™ software suite, which brings together all the geosciences software developed by IFP Energies nouvelles, was further upgraded. Tech'Advantage's activities, which had previously concentrated on exploration and production, were extended to including the refining and engine sectors. In addition, two contracts were signed with Total for a period of three years. One will lead to third-party application maintenance and the other to development.

IFP Technologies (Canada)

IFP Technologies (Canada) Inc.'s mission is to contribute to the development of IFP Energies nouvelles' R&D results in Canada, in particular by providing logistics support to the group's other subsidiaries. Its partnerships with local companies in Alberta also give it access to information on complex fields where innovative production processes are implemented (polymer injection enhanced recovery in the Pelikan Lake field, steam assisted gravity drainage (SAGD¹) production in the Senlac field, etc.).

IFP Training

Having delivered over 10,000 training days in 2010, 65% of which outside France, IFP Training remains the world leader in its areas of specialization. Growth was driven, in particular by Venezuela and the Middle-East, where an on-site training contract was signed by Satorp for the new Jubail refinery (Saudi Arabia), to train 1,500 people over a 2-year period. A new teaching policy was also launched to modernize all training products.

1. Steam Assisted Gravity Drainage

FOCUS ON...

6-INCENDIE, A NEW SPIN-OFF COMPANY FROM IFP ENERGIES NOUVELLES

SAFETY In April 2010, 6-Incendie (*Institut d'Ingénierie, d'Intelligence et d'Innovation Incendie, or Institute for Firefighting Engineering, Intelligence and Innovation*) was created as part of IFP Energies nouvelles' spin-off policy. Referenced by the French Department of Civil Safety and supported by the Chalon-sur-Saône Agency for Regional Economic Development (ADERC), this company coordinates and implements R&D projects in the field of firefighting in confined environments, on behalf of public and local authorities, as well as players and companies involved in the firefighting sector. It is founded partly on IFP Energies nouvelles' key expertise in process engineering, transposed to the rather unexpected field of firefighting.

QUESTIONS TO...

Franck Gaviot-Blanc

Process engineering Technician at IFP Energies nouvelles, voluntary firefighter and 6-Incendie founder

What prompted the idea of combining process engineering with firefighting?

F.G.-B.: When I joined IFP Energies nouvelles' Waste Thermoysis project in 2004, I soon realized that high temperature and oxygen-depleted environments lead to the decomposition of matter. The operational conditions for fighting a fire in an under-ventilated building are similar to those encountered in a thermoysis unit, but much more dangerous: when a firefighter opens the door of a room that's on fire, he can cause an explosion – the infamous backdraft. Following thermoysis tests, I then sought to understand the mechanisms



governing thermal decomposition – not of waste this time, but of synthetic materials and, in particular, those found in homes. That is how it all began.

Why create a company in the field of fire engineering?

F.G.-B.: In 2006, I took over responsibility for testing within the *Programme de recherche sur l'optimisation des moyens extincteurs pour la suppression des incendies en structure* (Promesis – French research program to optimize fire-extinguishing methods to put out structural fires). We tested and characterized the performances of several fire hoses and extinguishing agents, including a new fire hose technology with optimized ergonomics and distribution, which I fine-tuned and which led to a patent being filed by IFP Energies nouvelles. It will be marketed by Desautel from 2011. It was against this background that I first approached IFP Energies nouvelles' spin-off unit. For me, creating 6-Incendie is a way of developing and using knowledge, resulting from the synergy between my work and my passion.



What are 6-Incendie's missions?

F.G.-B.: We provide support to risk control players for the implementation of research programs aimed at improving the efficiency and safety of firefighting players. Our market research enabled us to evaluate market expectations and define the strategic objectives of our company. My associate is responsible for project coordination, while I am in charge of technical aspects. Our expertise is already beginning to gain recognition outside France, and we have been consulted by the Belgian Ministry of the Interior, as well as Louisiana State

University Fire and Emergency Training Institute.

What has your spin-off company status contributed?

F.G.-B.: I have been supported since the Promesis project and throughout the various stages in my reflection process. My contacts within the company were open-minded, attentive and provided sound advice, even though the field covered by 6-Incendie is an unusual one for IFP Energies nouvelles! Setting up a company is quite a challenge; benefiting from the tailored support and industrial experience of IFP Energies nouvelles is a valuable asset.

“THE INNOVATION SUPPORT OFFERED TO SMEs AND INTERMEDIATE-SIZED COMPANIES GIVES THEM ACCESS TO IFP ENERGIES NOUVELLES’ EXPERTISE AND NETWORK OF PARTNERS.”



Georgia Plouchart
SMEs Relations Division

Over
2/3

of SMEs supported by IFP Energies nouvelles have seen their turnover increase.

SUPPORTING INNOVATIVE COMPANIES

SPIN-OFF SUPPORT

IFP Energies nouvelles provides support to employees wishing to create companies that use innovative technologies and know-how developed or used by IFP Energies nouvelles, whatever their field of application, which neither IFP Energies nouvelles nor its subsidiaries intend to bring to market.

This encouragement system schedules an incubation period of 6 to 18 months, during which time IFP Energies nouvelles supports the employee's project and shares its business start-up experience: market research, business model, development plan, legal and financial aspects, search for and equipping of premises, etc.

TECHNOLOGICAL SUPPORT FOR SMEs

IFP Energies nouvelles implements a policy of providing innovation support of SMEs and intermediate-sized companies, giving priority to the eco-industries sector. IFP Energies nouvelles transfers technologies or know-how acquired in its own fields of activity to these companies. The support provided also takes the form of an R&D partnership, to help companies develop an innovative process or product that will enable them to stand out in their market. The SME only pays IFP Energies nouvelles in the event of commercial success, in the form of royalties calculated on the basis of revenues.

Hence SMEs have access to IFP Energies nouvelles' technical resources, its expertise in more than 50 professions and its very extensive network of academic and industrial partners. IFP Energies nouvelles also shares with SMEs its experience in the fields of intellectual property, project management and the industrial



IFP Energies nouvelles provides partner SMEs with access to its technical testing resources.

development of research more generally. Each year, around 400 new contacts are made with SMEs. As a result some fifty projects undergo technical and economic analysis, with some twenty to thirty of these leading to a partnership agreement.

PROTECTING INNOVATION

Patent filing is a key component of IFP Energies nouvelles' research development strategy. With a portfolio



22 SMEs supported in 2010

In 2010, IFP Energies nouvelles signed 22 technological support agreements with innovative SMEs, including 10 in the eco-industries sector. 4 technology licenses were granted and 4 patents filed.

FOCUS ON...

ECO-INDUSTRIES STIMULATE SME INNOVATION

ENVIRONMENT Against a background of new energy technologies growth, IFP Energies nouvelles gives priority to supporting SMEs and intermediate-sized companies with projects related to eco-industries. Three of these stood out in 2010.



Tackling pollution caused by oil and gas

With the help of IFP Energies nouvelles, this company has developed a regenerable pumice-stone based absorbent to tackle oil and gas pollution. Capable of absorbing hydrocarbons in aqueous media without losing its buoyancy, this absorbent can also be used for setting fire to layers of hydrocarbon on water and keeping them burning. IFP Energies nouvelles contributed its expertise in separation techniques to validate the process.



Treatment of dry cleaning waste water

Perchloroethylene is a chlorinated solvent widely used in the dry cleaning industry to treat certain stains. The Dioperk process developed by Diotech traps perchloroethylene using a transfer tank padded with an absorbent and therefore enables unpolluted water to be released. IFP Energies nouvelles contributed its expertise in separation techniques to select the appropriate absorbent, define implementation and determine the dimensions of the equipment.



Real-time analysis of pollutant traces in motor vehicle exhaust gas

This company has developed a high-resolution transportable mass spectrometer based on FT-ICR (Fourier Transform Ion Cyclotron Resonance) technology. It enables analysis of complex mixtures and real-time detection of pollutant traces in motor vehicle exhaust gas. IFP Energies nouvelles validated the technology proposed by Alyxan by conducting exhaust gas measurements on its engine benches.



WHAT OUR PARTNERS HAVE TO SAY...

ACTIVE SUPPORT FOSTERING THE DEVELOPMENT OF ECOPOMEX

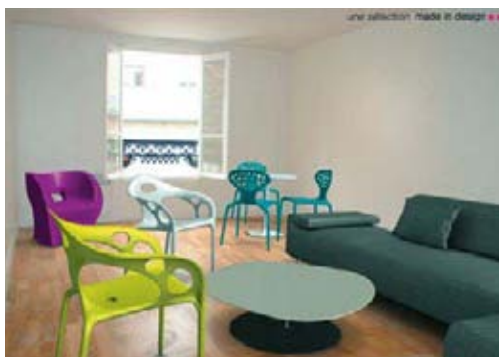
IFP Energies nouvelles has supported Ecopomex since it was created

in 2007, both in terms of R&D and obtaining funding – from Oseo, for example. In addition, IFP Energies nouvelles helped us identify new markets for our products, such as the combustion of hydrocarbons in the event of oil spills. Finally, our presence on the IFP Energies nouvelles stand at the Pollutec Trade Fair in Lyon, in December 2010, was followed by significant press coverage, helping to raise the profile of Ecopomex.”

Sami Hosagasi

Chairman and CEO of Ecopomex

3D visualization using Previznet software.



of over 12,900 live patents worldwide, IFP Energies nouvelles is the 10th ranked patent filer in France in 2010 in terms of the number of patents published and the 10th ranked French patent filer in the United States (2009). This “patentability” is taken into account from the very start of research projects, with the involvement of IFP Energies nouvelles industrial property specialists alongside R&D project managers.

FINANCIAL SUPPORT

IFP Energies nouvelles’ support for innovation also takes the form of financial participation in specialized investment funds for the eco-industries and eco-energies sectors. In addition, IFP Energies nouvelles provides technical expertise in terms of selecting the companies to be supported.

The 3E seed money fund (Emertec-Energy-Environment)

Created in 2003 by IFP Energies nouvelles, the *Caisse des dépôts* and the CEA, this fund is dedicated to new environment technologies and targets start-up companies.

The Demeter expansion capital fund

This is the first European fund to specialize in eco-industries and eco-energies. It was created in 2005 on the initiative of IFP Energies nouvelles, the *Caisse des dépôts* (CDC Entreprise) and Veolia Environnement.

The Demeter 2 expansion capital fund

Launched in 2009 by the founders of Demeter and new subscribers, this fund specializes in eco-industries and eco-energies, with a European scope. The new themes covered by Demeter 2 include regional development, sustainable construction and clean transport, in particular electric vehicles.

TWO SUCCESSFUL SPIN-OFF PROJECTS

POWELTEC

The first company to emerge as a result of IFP Energies nouvelles’ spin-off policy, Poweltec is a service company specializing in the enhanced recovery of hydrocarbons using polymers. It tests and recommends the most efficient polymers to improve oil and gas production, ensuring these polymers meet environmental standards in terms of eco-toxicity. In 2010, its revenues increased significantly, particularly on the international market, with the launch of new products in China and Africa. The number of wells treated is also increasing, with 21 wells in 2010 compared to 7 in 2009.

PREVIZNET

A specialist in “augmented reality”, this company markets 3D visualization software dedicated to the interior design market. It is based on IFP Energies nouvelles image-processing expertise.



Poweltec applies laboratory-validated processes and methodologies in the field.

PORTFOLIO OF IFP ENERGIES NOUVELLES' MAIN INVESTMENTS AS OF 31 DECEMBER 2010

REFINING AND
PETROCHEMICALS
CATALYTIC PROCESSES

AXENS

100%

EURECAT*

50%

REFINING, PETROCHEMICALS
AND HYDROGEN-FIRED HEATER
ENGINEERING

HEURTEY PETROCHEM*

39%

NATURAL GAS
TREATMENT
ENGINEERING

PROSERMAT*

100%

CO₂ STORAGE
ENGINEERING

GEOGREEN*

40%

PROCESS
SIMULATION

RSI*

100%

POWERTRAIN
ENGINEERING

D2T*

100%

TRAINING

IFP TRAINING

51%

SPIN-OFF

POWELTEC**

24%

GEOSCIENCE CONSULTING
AND SOFTWARE

BEICIP-FRANLAB

100%

TECH'ADVANTAGE*

100%

**IFP
TECHNOLOGIES
CANADA**

100%

INVESTMENT FUNDS
ENERGY & ENVIRONMENT

DEMETER/DEMETER 2*

10%

3E*

6%

OTHER STAKES:

CGGVERITAS

4%

TECHNIP

3%

* via IFP Investissements
** via ISIS développement