

# Dutch Developments

Netherlands Investment News

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## OF INTEREST

### Amsterdam Underground

Plans for a 12-lane underground highway in Amsterdam will include four tunnels running about a mile under the Zuidas section. The project also has underground metro and rail lines. If approved this year, the highway could open in 2016. The estimated cost is €1.74 billion, of which the government would provide €775 million.

### Happy Dutch

A new European Commission study shows that the Dutch are among the most satisfied people in Europe about their quality of life. Dutch citizens reported a high degree of satisfaction regarding their personal situations, jobs and homes. And also recorded positive scores on national concerns, such as the cost of living, health care and social security.

### Growing Patents

Despite an overall worldwide decline in patent requests, the Netherlands had a growth rate of 3 percent last year, according to the World Intellectual Property Organization. It is the third fastest growing nation for filings, behind Japan and China. Dutch company Philips was the Netherlands' top patent filer and the world's fifth largest, with 1,295 applications.



Pioneers in international business

## With 2009 Results, the Netherlands Maintains Strong Position as Global Foreign Investment Recipient

As one of the world's largest foreign direct investment (FDI) recipients, the Netherlands posted strong 2009 results for a year marked by slow recovery from a global economic recession. The Netherlands Foreign Investment Agency (NFIA) supported the attraction of 155 foreign investment projects, representing 3,887 jobs and planned investment of \$4.27 billion.

This exceptionally high investment figure (compared to last year's figure of \$850 million) is due to two extremely capital-intensive projects in the energy sector – a German energy company's coal-fired power station and a Finnish firm that began building a biodiesel production facility on the Maasvlakte, west of the port of Rotterdam.

Although more than half (82) of the projects came from Asia, the United

States continued to be the leading single-country investor with 49 projects, of which 23 were initial establishments by companies in the Netherlands. Adding in projects from Canada and Mexico, North America as a region totaled 52 projects and 1,166 jobs.

Although the share of American projects in the total has declined over the past ten years, The United States' impact is still very large. More than 30 percent of the total number of projects comes from the US, accompanied by nearly 25 percent of the total number of jobs.

"The idea that foreign companies are good for economic dynamics and competitiveness of the Netherlands is the guiding principle for the work of the NFIA," according to NFIA Commissioner Bas Pulles. "Our statistics show that a number of industries seemed less prone to be

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To mark the presentation of the NFIA's annual figures, Commissioner Bas Pulles (second from left) opened trading at the NYSE Euronext in Amsterdam on March 16.

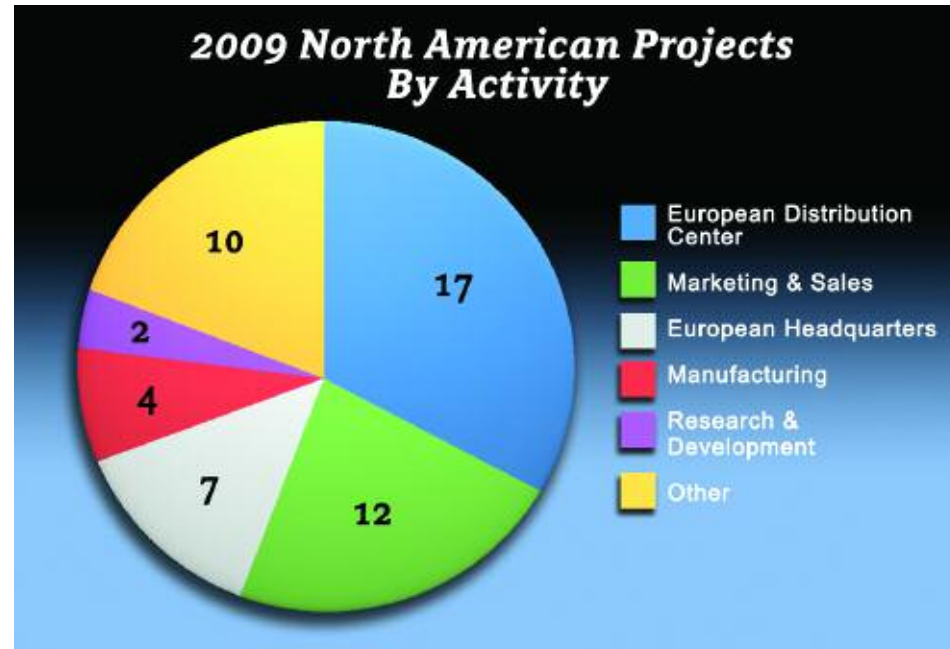
## NFIA 2009 Results

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hit by the economic crisis, such as the food industry, the healthcare industry and energy- and sustainability-related sectors.

“NFIA’s results for 2009 show that the Netherlands was able to take good advantage of these opportunities,” adds Pulles. “As such the NFIA and its regional partners have been involved in European restructuring projects that have led to substantial retention of employment in the Netherlands.”

Another important trend cited by Pulles is that the average value of projects (as measured by investment amount and number of jobs) is on the rise again, reversing a four-year downward course. If the very large capital-intensive projects are left out of consideration, the average number of jobs per project numbers 20. “These relatively small investments, mostly initial establishments, offer perspective



for growth and lend themselves to being embedded in the Dutch business community,” says Pulles.

The greatest percentage of worldwide projects (31%) was related to marketing

and sales. Of these 48 projects a quarter originated from China and a quarter from North America.

The share of research and development projects (10%) increased over the previous year. Most of these came from Asia, namely Korea, China and Malaysia. In addition, the total number of production-related projects and IT service centers also went up in 2009.

The top five industry sectors that delivered the most projects for 2009 were information technology (25), electronic components (10), life sciences/healthcare (9), chemicals (8), and food and nutrition (8).

Correspondingly, the top five sectors that brought in the most jobs were information technology (659), food and nutrition (473), energy (420), life sciences/healthcare (329) and logistics and transportation (219).

In close cooperation with regional acquisition partners, the NFIA has developed the Investor Development (ID) program targeted at the foreign companies already in the Netherlands and their parent companies abroad. In 2009, ID produced 22 confirmed projects, representing an investment of nearly \$280 million and more than 1,600 jobs. Nearly 50 percent of these projects were related to North American companies.



## VIEWPOINT

by Bas Pulles  
Commissioner, NFIA

### “BIG IN BUSINESS”

Although UNCTAD (United Nations Conference on Trade and Development) reported that global FDI in 2009 fell by 39 percent from the previous year, the Netherlands did not suffer that type of sharp decline.

We more than held our own (see the cover story on 2009 results), and are positioned well at the start of 2010 with a very healthy portfolio of nearly 600 active projects.

A number of macroeconomic indicators show that the global climate for international investments is slowly improving. Why is that important to us? Foreign companies provide 15 percent of all Dutch jobs and deliver 30 percent of the total volume of business. Additionally, they are responsible for 22 percent of investments in research and development.

These facts make the impact of FDI clearer for the general public and reinforce its value. Therefore, the concern for a good investment climate continues to be of the utmost importance.

Globalization is not abstract or intangible, and it produces a lot of good for the Netherlands. Foreign investments help ensure a strengthening of the Dutch economic structure. Thanks to internationalization, the Netherlands may indeed be a small country, but it is big in business.

## WEST COAST OFFICE MOVES AND ADDS



As part of a larger strategy to consolidate operations for the Dutch government in the West, the NFIA office moved from San Mateo to San Francisco at the beginning of the year. At the same time, the Consulate General’s office moved from Los Angeles to San Francisco. Also uniting in San Francisco are the Netherlands Business Support Office and the Netherlands Office for Science and Technology, both formerly situated in San Mateo. All these organizations are now in One Montgomery Tower downtown.

On the personnel side, in November of last year, Stans Kleijnen joined NFIA as an area director for the Western US region. Her primary responsibility will be assisting companies in Silicon Valley to establish or expand their European operations in the Netherlands.

She has a strong background in the high-tech industry and brings with her more than 20 years’ experience working extensively with Silicon Valley companies.

Prior to joining NFIA, Kleijnen headed up her own company, Orange Canopy, Inc., specializing in executive coaching and management consulting. Before that, she worked at Sun Microsystems for more than 13 years. At the end of her time there, she was vice-president of market development engineering working closely with Sun’s software partners worldwide. Previously she played a critical leadership role on the team that developed the Java platform.

Earlier in Kleijnen’s career, she worked in the Netherlands at Philips Electronics and in Italy at the European Community Research Centre. She earned a Bachelor’s in computer science from Computer Science College (HIO) in Eindhoven.

## Benchmark Study Touts Benefits of Netherlands as European Distribution Location



The Netherlands ranks among the top European distribution locations, particularly when it comes to taxes, labor, and strategic location, according to a new benchmark study conducted by the Holland International Distribution Council (NDL/HIDC), Buck Consultants International, and Ernst & Young.

The study, “High Quality, Competitive Costs, Benchmarking the Netherlands as a Gateway to Europe,” compared leading European logistics locations on factors relating to establishing distribution centers. The study analyzed various industries by reviewing business case studies and characteristics specific to supply chains in each industry.

The Netherlands offers a number of strategic advantages when it comes to distribution center activities, according to the study. The country’s position as the “gateway to Europe” and the large volume of intercontinental sea and air freight into the country help keep transport tariffs competitive. A flexible workforce and streamlined, business-friendly tax and customs procedures are two additional benefits cited as key advantages for potential Dutch distribution centers.

For companies seeking sustainable supply chain solutions, the Netherlands again offers a number of competitive advantages. The availability of environmentally friendly modes of transportation, as well as the country’s central location, are important benefits to companies interested in reducing their carbon footprint.

## RECENT MOVE-INS

A global network infrastructure provider, Juniper Networks of Sunnyvale, CA, has opened a customer-briefing center in Amsterdam. The center will service customers from the EMEA region. Visitors to the center will be able to test products, view live demonstrations and presentations, and watch videos of customer testimonials.

Cargill (Minneapolis), a manufacturer of food and agricultural products, has opened a chocolate production facility in Deventer. The company built the \$22.3 million facility on the site of its previous coatings factory. The new facility will double the Cargill Cocoa and Chocolate coatings capacity, and also expand its fillings capacity.

Pharmaceutical company Schering-Plough, located in Kenilworth, NJ, has opened a new manufacturing facility in Oss to boost capacity and help meet European demand for the company’s injectable drugs and hormonal products. About 25 percent of the plant’s capacity is earmarked for BioConnection, a collaborative venture between the Dutch government and private industry that assists smaller biotech firms in manufacturing their products.

Zero Motorcycles of Santa Cruz, a manufacturer of electric motorcycles, has opened a new European headquarters in Amsterdam. The new facility will expand the availability of the company’s Zero S, Zero X and Zero MX models.

Toronto-based Dyadem, a provider of software and services relating to operational and quality risk management initiatives, has opened a new European office in Amsterdam. Its web-based software platform is designed to centralize and integrate companies’ risk management needs, and assist in compliance with various industry regulations and standards.

# FOCUS ON: *Robotics*



Photo: Hollandse Hoogte

Consider Denise, a two-legged robot that walks more like a person than a machine. Martijn Wisse in the Biorobotics Laboratory in Delft developed Denise. Like us, she falls forward and then catches herself with each step.

How about arms? Under the leadership of Dutchman Dr. Patrick van der Smagt, a European research team is currently developing the most human robotic arm ever created. The arm will simulate virtually all human limb movements and will partially take orders from a “brain” modeled on ours. Called Robo Habilis, it will be able to snap its fingers, handle an egg, and pick up a cup of coffee without spilling it.

Until recently, robots carried out relatively narrow, standardized tasks, such as screwing a cap onto a bottle. Nowadays, robots have learned to “see” and “think” using 3-D vision technology and robot mechanics. They can categorize products by certain features and shapes, without each object having to be identical. The new robotic skills are a synthesis of new technologies that enable robots to perform complex tasks.

Dutch enterprises have become accomplished in developing new robots and linking existing robots into complex systems via smart software. Close cooperation within industry as well as solid partnerships with universities of technology and knowledge institutes have made possible these innovations and skills. Dutch researchers and businesses are continually enhancing their special role in the robot’s transition out of factories and into ordinary workplaces and even households.



VDL Steelweld BV

Selected Dutch applications discussed below describe the introduction or extended use of robots in such industries as food, horticulture, medical rehabilitation, and metalworking.

### *Handling food*

The new Loadmax robot developed by Dutch machine building company Jentjens has found a place in various segments of the food industry. In one case, its gripper grasps scattered sausages and quickly and precisely places them neatly in a small box. Software enables the Loadmax to select products based on any number of visual features, such as shape, color and size.

The Netherlands is a leader in the production of cheese. When aging cheese, someone must rotate, brush, and coat it in plastic, then return it to the shelf. Increasingly that someone is a robot from Ferdar Automation Technology.

The Netherlands dairy industry has benefited from sophisticated robot technology. For instance, as cows walk independently and voluntarily through a self-cleaning cowshed, they are milked by a fully automated milking robot. The robot, made by the Dutch company Lely, milks cows in more than 60 countries around the world.

### *Horticulture innovations*

Two new robots have entered the Netherlands rose industry: a cutting insertion system and the rose harvesting robot.

The cutting insertion system consists of a conveyor belt, a camera/software unit, and a robotic arm. The arm takes the cuttings from the conveyor belt as they pass by and places them gently and precisely in small pots. The benefits are consistent quality and cost savings plus less concern with the high turnover of unskilled labor.

The rose harvesting robot scans the rose plants from above. If it decides a rose is ready for harvesting, the arm descends and cuts the stem with extreme positional accuracy. The rest of the processing and packaging is completely automatic.

### *Health applications*

While robots have enhanced the abilities of surgeons for some time, they’re now helping patients undergo rehabilitation. Clinic Het Roessingh has been successfully collaborating with the University of Twente, Northwestern University in Chicago, and the Dutch business sector for many years. These efforts have resulted in several robotic systems for partly paralyzed patients, such as from a stroke. Examples include:

- Freebal, which compensates for gravity when the patient makes arm movements
- Dampace and Limpact increase or lower resistance for targeted training
- Lopes, an exoskeleton, helps to teach patients how to walk again following paralysis.

Jaap Buurke, responsible for the restoration of human function at

Roessingh Research & Development, notes that Dutch robot systems focus on the patient’s learning and training process rather than being driven by technology. “For example, we place great emphasis on learning theory and the use of serious games,” he says. This approach, which is typically Dutch, is the result of close collaboration between clinics, researchers, and businesses.

### *Metalworking*

Metalworking represents a field where robots have been used for years, especially in the automotive assembly. While the Netherlands does not really have a car industry, Dutch companies such as VDL Steelweld have been active in their manufacturing for many years. A robust family-owned company, VDL Steelweld designs and arranges production lines for carmakers such as Ford, Volvo, Jaguar, and Land-Rover. The robots are accurate

in their tasks to within a tenth of a millimeter.

The latest technological metalworking advances involve programming directly from computer-aided design systems. “The Netherlands is the only country in western Europe where extremely small batches of a product and one-off items are made,” says Remco Valk of Valk Welding. Valk produces towing hooks, for instance, in batches of between five and 25. Each part requires perhaps five minutes of welding. So in some cases, reprogramming must occur every half hour.

Minimizing the time required to re-adjust the robot’s settings is extremely important. Valk Welding supplies systems that use a 3-D drawing for totally automated programming of the welding robot within just a few minutes.



Photo: Ruben Keestra



Photo: Jaap Spieker



## EU and US Launch Joint Energy Council

The United States and the European Union have partnered to form the Transatlantic Energy Council, which will collaborate on research and environmental issues.

The group's first meeting took place in November in Washington DC. The council will meet annually, alternating between US and EU locations, and will report to the EU-US Summit.

Senior EU and US officials are tackling issues in three key areas: Energy Policies, Global Energy Security and Global Markets,

and Energy Technologies Research Cooperation.

November's meeting included a number of key policymakers, including US Secretary of Energy Steven Chu and Swedish Minister for Enterprise and Energy Maud Olofsson, who chaired the meeting. Attendees also included EU Commissioner for Energy, Andris Piebalgs, EU Commissioners for External Relations, Benita Ferrero-Waldner, and Research, Janez Potocnik, US Secretary of State Hilary Rodham Clinton, and Swedish Minister for Foreign Affairs Carl Bildt.

"I want to see energy security and climate change center stage in all our partner

ships around the world, and it is the right moment to step up our cooperation with the US," said Ferrero-Waldner. "As two of the greatest consumers of energy, we have a responsibility to work together to find solutions to some of the most challenging questions of our day."

The council is already working together on several initiatives, including the ITER project – a large-scale scientific experiment exploring the generation of commercial energy from nuclear fusion. Other projects include new ENERGY STAR® labeling for office equipment, and researching low-carbon energy technologies.

## Cruise Ship Training Center in Almere



operator training, team and leadership skills, ship handling and emergency response.

The Center has two "full-mission bridge" simulators, equipped with all the bridge systems and workstations to emulate a modern cruise ship. The visual field is displayed on a 240-degree circular screen for optimal view

The Center for Simulator Maritime Training (CSMART) in Almere, operated by the well-known cruise ship company Carnival, has taken virtual reality to state-of-the-art dimensions. From a room in a non-descript building in Almere outside of Amsterdam, you can be suddenly transported to the bridge of a ship entering any one of 20 major ports throughout the world.

This unique training facility opened last July and seeks to ensure the highest level of skills competency for cruise ship bridge teams. With the latest high-tech equipment and training tools, participants are tested in critical thinking, problem solving, ethical decision making and confidence through a series of courses in technical

during all situations including berthing/unberthing maneuvers. The visual environments offered in these simulators are of some of the world's major ports and cruise destinations. The operator can easily change sea and weather conditions and include traffic ships, aircraft and even marine life, such as a whale swimming by. For instrument training and ship handling simulation, there are also six part-task bridge simulators equipped



with three 40" LCD monitors for the visual scene.

Ten employees and an equal number of consultants operate and teach at the facility under the direction of Captain Hans Hederstrom, who has more than 40 years of maritime experience.

According to Hederstrom, "One of the aims with the bridge team management training is to implement a new bridge manning structure based on functions instead of ranks." This system is flexible, whereby the captain assigns functions to team members with regards to their competence and experience. Each function has a defined number of tasks to be performed, just as in many other high-operational and time-critical industries.

## Netherlands Hosts IT Global Conference



The 17th World Congress on Information Technology (WCIT) will gather in Amsterdam's RAI Convention Center from May 25 to 27. At this premier, invitation-only event, influential business leaders, public officials and opinion leaders from around the globe will come

together "to share and build a vision of a connected planet with universal access." Information technology as an enabler for economic growth serves as the main topic.

Under the theme *Challenges of Change*, delegates will discuss IT's role in such areas as energy, water, health, government, security, and finance. The goal is to apply information technology to accelerate change towards a better, safer, and opportunity-rich world. The meeting is expected to attract more than 2,000 visitors with delegations from 80 countries or more.

The conference breaks down into nine program tracks. The Mobility Track, for instance, will investigate solutions to high population densities, traffic congestion, logistics, and transport problems. IT applications such as proactive traffic management, satellite navigation, and road pricing can have a significant impact.



As another example, the Security & Safety Track will look at the myriad IT technologies and trends affecting public safety. Topics will include terrorism, border control, social safety, cyber crime, and vital infrastructure.

The conference recently added another track, taking place only on May 26, called Finance Special. Topics will include financial service providers, technology clusters, exemplary innovations, and recommended approaches and frameworks.

Aside from the program, delegates can experience the latest technical developments, innovations, and solutions in the various Track Pavilions.

For more information, visit: <http://www.wcit2010.org>

## BOMBARDIER OPENS SERVICE CENTER AT SCHIPHOL

The Montreal aircraft builder Bombardier Aerospace opened a maintenance base at Schiphol airport earlier this year for its Learjet, Challenger and Global business jets. The 45,000-square-foot facility is the first European service center completely operated by Bombardier itself and will employ 50 technical staff. The company's other European service center in Germany is a joint venture. There are also six service centers in the US.

For Bombardier, its own location on the European mainland is an important strategic move in order to more efficiently serve its growing international clientele. The facility at Schiphol will handle all necessary maintenance duties for the company's growing fleet of more than 550 private jets.

Michael McQuay, President of Bombardier Aircraft Service Centres, said the company considered more than 40 European airports for the center. He praised Schiphol as one of the top European airports, noting in particular its strategic location.

At first, Bombardier will rent a hangar at Schiphol for its operation, but the company has signed a statement of intent for the construction of a newly developed Bombardier Center at Schiphol Aerospace Exchange to be completed in 2012. The number of employees is forecast to grow to around 150 by then.

The company's service centers work closely with a large network of suppliers and maintenance firms in 21 countries.



Standing astride an airplane wing at the center's opening are (from left to right): NFIA Commissioner Bas Pulles; Jaap Bond, Vice Governor of the Province of North-Holland; Hilde van der Meer, Managing Director, amsterdam inbusiness; Ruud Bergh, Director Schiphol Area Development Company; Mike McQuay, President, Bombardier Aircraft Service Centers; Arthur van Dijk, Alderman for Economic Affairs of the Municipality of Haarlemmermeer

# Floating Houses in Amsterdam Achieve Dutch Goal of “Living with Water”



Photo: Hollandse Hoogte

Many people long for a house on the waterfront, but some Dutch residents have taken the concept to the next level with houses actually built IN the water.

IJburg is a community built partially on a series of artificial islands in the IJmeer, a lake east of Amsterdam. The islands are connected to the mainland via a series of bridges. A tramline shuttles residents and visitors to and from the islands, and residents use boats to travel within the floating community, and to the mainland.

The floating segment of the development was so popular when first announced that the city held a lottery to determine who could ultimately buy one of the first homes, which were finished in 2002. The final phase of construction is scheduled to be complete in 2012, although some delays may postpone the project's completion. Long-term plans for the commu-

nity include housing for 45,000 people, including construction of 18,000 more homes, as well as schools, shops, and even a cemetery.

The homes cost approximately €400,000, of which €120,000 is the fee for a 50-year lease of the water plot. A typical floating home is three stories, with more than 1,800 square feet of space, including three bedrooms and two bathrooms. The homes are constructed to the buyers' specifications, and include the latest advancements in heating and cooling systems. They are also designed to be environmentally friendly, and residents use on average 15 percent less energy than traditional homes.

IJburg is just one example of how the Netherlands, one of the most densely populated countries in the world, is dealing with space shortages and rising sea

levels. Two-thirds of the Dutch population already live below sea level, and the UN recently warned that rainfall in the country could increase by 25 percent this century. To address this, the floating houses are designed on concrete frames and can float and rise by as much as 18 feet.

Dutch policy makers recently adopted the philosophy of “living with water,” which includes a focus on working with natural resources and geography, and developing new technologies to support this effort. Some examples include shoring up dunes, re-establishing minor waterways to allow for sudden surges of water, and designating zones for intentional flooding in an emergency. The Netherlands plans for an additional €100 billion in new spending through the year 2100 to prepare for and address the effects of global warming.

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