

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 UNDER
THE SECURITIES EXCHANGE ACT OF 1934

Report on Form 6-K dated January 4, 2010

Commission File Number: 1-13546

STMicroelectronics N.V.
(Name of Registrant)

39, Chemin du Champ-des-Filles
1228 Plan-les-Ouates, Geneva, Switzerland

(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F Q

Form 40-F £

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes £

No Q

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes £

No Q

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes £

No Q

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- _____

Enclosure: A joint press release dated January 4, 2010 announcing that Enel Green Power, Sharp and STMicroelectronics signed an agreement for the largest photovoltaic-panel manufacturing plant in Italy.



SHARP



Press
Release

Enel Media Relations
Tel. +39 06 8305 5699
Fax +39 06 8305 3771
Email: ufficiostampa@enel.it

Sharp Corporation
Corporate Public Relations Division
22-22 Nagaike-cho, Abeno-ku, Osaka (545-8522), Japan
Tel: +81-6-6621-1221

STMicroelectronics Media Relations
Tel: +41 22 929 6945
e-mail: mariagrazia.prestini@st.com

ENEL GREEN POWER, SHARP AND STMICROELECTRONICS SIGN AGREEMENT FOR THE LARGEST PHOTOVOLTAIC-PANEL MANUFACTURING PLANT IN ITALY

- *Enel Green Power, Sharp and STMicroelectronics join forces to produce innovative thin-film photovoltaic panels.*
- *The plant, located in Catania, Italy, is expected to have initial production capacity of 160 MW per year and is targeted to grow to 480 MW over the next years.*
- *In addition, Enel Green Power and Sharp will jointly develop solar farms focusing on the Mediterranean area, with a total installed capacity at a level of 500 MW, by the end of 2016.*

Geneva, January 4, 2010 – Today, Enel Green Power, Sharp and STMicroelectronics signed an agreement for the manufacture of triple-junction thin-film photovoltaic panels in Italy. At the same time, Enel Green Power and Sharp signed a further agreement to jointly develop solar farms.

Today's agreement regarding the photovoltaic panel factory follows the Memorandum of Understanding signed in May 2008 by Enel Green Power and Sharp. STMicroelectronics has joined this strategic partnership.

This agreement marks the first time that three global technology and industrial powerhouses have joined together in an equal partnership to contribute their unique value-add to the solar industry. It brings together Enel Green Power, with its international market development and project management know-how; Sharp, and its exclusive triple-junction thin-film technology, which will be operational in the mother plant in Sakai, Japan as of spring 2010; and STMicroelectronics, with its manufacturing capacity, skills and resources in highly advanced, hi-tech sectors such as microelectronics.

The factory, located in Catania in the existing M6 facility to be contributed by STMicroelectronics, is expected to have an initial production capacity of 160 MW per year. The plant's capacity is targeted to be gradually increased to 480 MW per year over the next years and right from its start will represent the single most important production facility for solar panels in Italy. Photovoltaic panel manufacturing at the Catania plant is expected to start at the beginning of 2011.



SHARP



Press
Release

The project of 160 MW will require a total investment of 320 Million euros and will be funded by a combination of equity, state grants and project financing with no recourse to the Joint Venture's shareholders beyond their quota in the Joint Venture. Each partner will subscribe one third of the equity – an expected contribution up to 70 million Euros each, either in cash or in-kind - and will hold one third of the shares in the new Joint Venture Company.

The factory output will be used to serve the most attractive solar markets in the EMEA (Europe, Middle East and Africa) region with a particular focus on the Mediterranean area. In this region, Enel Green Power and Sharp already have important sales networks and also plan to jointly develop solar farms. Enel.si, the Enel Green Power company specializing in the installation of photovoltaic systems in the retail market, will also participate in the marketing effort, offering panels directly and through its franchisee network of over 500 qualified installers in Italy.

Enel Green Power and Sharp have signed an additional agreement aimed at the creation of an equal joint venture to develop solar farms. The goal is to install cumulative capacity at a level of 500 MW by the end of 2016, making use of the photovoltaic panels manufactured at the Catania factory. The effectiveness of the agreements signed by the parties is conditional upon the clearance released by the relevant authorities concerned.

Triple-junction thin-film photovoltaic panels are particularly suitable for medium and large-scale photovoltaic power generation. Compared to ordinary silicon solar panels, the triple-junction thin-film photovoltaic modules are able to maintain a very high level of energy conversion efficiency even in very hot climates. Thanks to their lower silicon content, these modules are also less exposed to raw silicon price volatility.

Catania represents an ideal location as it takes full advantage of an existing semiconductor plant and related facilities as well as of very important workforce skilled in silicon-based manufacturing. In addition, Catania hosts Conphoebus, an Enel research center fully dedicated to renewable sources, solar in particular, and energy savings. Moreover, Sicily is one of the key regions in the Mediterranean area for the development of solar farms and provides a unique location for all logistics necessary to reach the neighboring markets.

About Enel and Enel Green Power

Enel is Italy's largest power company, and second among Europe's listed utilities by installed capacity. It is an integrated player which produces, distributes and sells electricity and gas. Further to the acquisition of the Spanish utility Endesa, Enel has now a presence in 23 countries with over 96,000 MW of net installed capacity and serves 60.8 million power and gas customers.

Enel Green Power is the Enel Group company dedicated to developing and managing energy generation from renewable sources in Italy and abroad. It operates some 4,700 MW in plants relying on hydro, wind, geothermal, solar and biomass sources in 14 countries in Europe



SHARP



Press
Release

and the Americas. With over 17 billion kWh produced annually, Enel Green Power is a world leader in the renewable energy sector. For more information please visit Enel's website www.enel.com and Enel Green Power's web site at www.enelgreenpower.com

About Sharp

Since its founding in 1912, Sharp has developed numerous world-first and Japan-first products, including the first Japan-made radios, TVs, the world's first all-transistor/diode desktop calculator. Sharp has contributed to society by commercializing these unique products.

Today, in addition to its core LCD TV business, Sharp is also focusing on its solar cell business. This year marks 50 years since Sharp first started researching solar cells. Over this long period of time, solar cells made by Sharp have been used not only in residential and industrial applications, but also on lighthouses and satellites, thus proving their long-term reliability. Sharp is now pressing ahead with constructing one of the world's largest solar cell production facilities for thin-film solar cells at Sakai City in Osaka Prefecture, which is scheduled to begin mass production by March 2010.

Sharp Corporation employs 59,100 people in the world (as of October 31, 2009) and recorded consolidated annual sales of 2,847,227 million yen for the fiscal year ended March 31, 2009.

For more information, please visit Sharp's Web site at <http://sharp-world.com/index.html>

About STMicroelectronics

STMicroelectronics is a global leader serving customers across the spectrum of electronics applications with innovative semiconductor solutions. STMicroelectronics aims to be the undisputed leader in multimedia convergence and power applications leveraging its vast array of technologies, design expertise and combination of intellectual property portfolio, strategic partnerships and manufacturing strength. In 2008, the Company's net revenues were \$9.84 billion.

For more information, please visit STMicroelectronics's web site at www.st.com

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, STMicroelectronics N.V. has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

STMicroelectronics N.V.

Date: January 4, 2010

By: /s/ CARLO FERRO

Name: **Carlo Ferro**

Title: **Executive Vice President and Chief Financial Officer**
