CLIMATE & STRATEGY

New Research Outlines Plan to Unleash Energy Efficiency Opportunity in Buildings

Authors Develop "Aggregated Investments Model" to spur Energy Efficiency Upgrades in Buildings and Fuel Economic Recovery in Spain

Madrid, **19**th **October 2010**. Climate Strategy & Partners – a specialist consultancy in strategies relating to climate change – today launched a landmark report which unravels many of the complex issues surrounding the financing of energy efficiency in buildings. Climate Strategy believes that a saving of 30% of the energy used in Spanish homes and small commercial buildings is worth over Euro 3,000 million per year in saved costs to consumers and would create thousands of new jobs in a vibrant Spanish energy efficiency upgrade industry.

The size of the opportunity is enormous. Buildings use 40-45% of the energy consumed in the US, UK, and Europe and studies show that this could be cost effectively reduced by 20-50%. Energy efficiency retrofits will reduce greenhouse gas emissions and improve the energy security of any country where they are implemented by reducing energy demand. Yet, deploying energy efficiency upgrades in buildings at scale has proven elusive, to date, as there are insufficient financial resources available to energy efficiency upgrades and many stakeholders' interests in individual projects are miss-aligned.

In a new white paper, "*Financing Energy Efficiency Retrofits in Buildings*" Peter Sweatman, Founder and CEO of Climate Strategy and Partners, and Katrina Managan, Fulbright Scholar and International MBA Candidate at IE Business School analyze existing energy efficiency policies and business models to unleash the energy efficiency opportunity in residential and small commercial buildings, which is the most under-served segment in the current market.

"We set out to design a solution to make it as easy to undertake and finance an energy efficiency upgrade as it is to sign up for a new credit card or take out a car loan," said Sweatman.

The authors propose creating bankable energy efficiency assets that have broad access to wholesale, efficient financing in the capital markets. These assets are standardized and designed using an openorigination architecture to spur competition among many possible distributors such as banks, utilities, ESCOs and other retail outlets. The new model developed, the Aggregated Investments Model, can be used to unleash the energy efficiency opportunity in any market.

According to co-author Managan, "Energy efficiency upgrades provide a win, win, win, opportunity for the economy, the environment, and energy security. Our recommended business model applies good sense energy conservation within the context of the energy bill itself."

The right policy framework will accelerate deployment of the Aggregated Investments Model. Integral to the author's regulatory recommendations is the enabling of on-bill upgrade repayment and government credit enhancement to kick-start a market which is in its early stages of development. The Climate Strategy & Partners paper analyzes the regulatory efforts in the US and the UK and proposes some regulatory pathways that will help Spain accelerate the scaling of its own energy efficiency market.

An energy efficiency upgrade enables a building to achieve the same level of energy services, such as heating and lighting, with less actual energy – thus presenting a huge opportunity for people to save money while creating jobs. Furthermore, the upgraded building will be substantially modernized with

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increased liveability and better acoustics. US models built by the American Council for an Energy Efficient Economy suggest an investment of Euro 1 million in energy efficiency upgrades creates 7 jobs. These jobs would be substantially at energy efficiency retrofit providers who install more efficient lighting, smart thermostats, insulation, new boilers and air conditioners. Yet as this market is new, the engagement in such a programme by Spanish industry would create new expertise, "know how" and intellectual property related to the delivery and management of building and energy services.

Comments on Process, from Sponsors and from Expert Reviewers

The white paper is the result of a detailed literature review of over 120 reports, journal articles and interviews subsequently reviewed by 35 experts selected equally from the US, UK and Spain. Expert reviewers represent a balanced input from the key stakeholder groups: Banks, Energy Companies, NGOs/ *Think Tanks* and academia. "It has been truly an honour and our privilege to have had the support of such a key group of leading experts in the subject of energy efficiency" remarked Peter Sweatman.

According to Bruce Schlein, Vice President of Environmental Affairs with Citi Corporate Sustainability and an expert reviewer of the white paper, "The study does an excellent job assessing both the key barriers and potential solutions for developing the energy efficiency upgrade market."

Eric Schlie, Vice Dean of the MBA programme at IE Business School, the knowledge partner of the report, said "The field of energy efficiency in buildings has received relatively little attention in recent years, and yet its importance is undeniable, which is precisely what makes this paper so timely".

Gas Natural Fenosa is co-sponsoring the launch of the report and, as a leading company in Spain in delivering energy efficiency and comfort, has made cumulative investments of over Euro 100 million during the past 10 years in its customer's installations. The Director of Gas Natural Fenosa's Energy Efficiency Centre, José Javier Guerra, explains "Gas Natural Group is aware that the application of retrofit energy efficiency measures in buildings requires new business models to enable society to extract the potential savings. Through this report, Climate Strategy initiates the right dialogue so that the various stakeholders, agencies, energy service companies and financial institutions can build a common language and understanding for that purpose."

Antonio Lopez-Nava, Chief Executive of the Spanish Energy Efficiency Association (A3E) notes "It is key for us to stimulate greater resource commitments into the energy efficiency upgrades of Spanish buildings. We are proud to support and distribute the findings of Climate Strategy's white paper among our members and believe that Spain can greatly benefit from pursing its recommendations."

"The white paper is extremely well done and highly informative. It is a repository of useful information. An excellent piece of analysis -- I learned a lot from reading it" said expert reviewer Michael Hanemann, Faculty Co-director Climate & Energy Policy Institute, UC Berkeley USA.

Notes to Editors:

Climate Strategy

Climate Strategy is a consulting firm specialised in the strategies, markets and opportunities created by the need to combat climate change. The firm provides strategic advice and first class project execution to clients in areas of Clean Energy, Clean Technology, Energy Efficiency, Environment and Sustainability.



With its headquarters in Madrid, Climate Strategy is proud to serve many international firms including: Climate Change Capital, Grupo Ferrovial, Bloomberg New Energy Finance, Trucost, Gestamp, Grupo Popular and TesseraSolar.

Founded in 2009, Climate Strategy firmly believes that the dynamic policy developments guiding the global transition to a low carbon economy will increase the flow of related commercial challenges and opportunities to a growing number of firms. Through its work with clients and by the production of reports and white papers, Climate Strategy hopes to forward the progress to a low carbon future.

Peter Sweatman

Peter Sweatman is co-author and the founder and Chief Executive of Climate Strategy & Partners, a strategic consultant in Clean Energy, Clean Technology, Energy Efficiency and Climate Change. For 5 years directly prior to this Peter was Managing Director responsible for Iberia and Latin America for Climate Change Capital, one of the world's leading specialist fund manager and advisors in the low carbon economy.

Peter holds a Masters degree in Engineering and Management Studies from Cambridge University. In 1991, he joined JPMorgan in Corporate Finance where he spent 9 years and was responsible for client business mainly in debt capital markets for Iberia and Latin America from London and then New York. In the year 2000, Peter became a social entrepreneur joining with other ex-bankers to found and run three NGOs : Charity Technology Trust (<u>www.ctt.org</u>), New Philanthropy Capital and Catalyst Climate Change Trust.

Peter is an active member of the Ashoka Support Network and a non-executive member of the board of the UK Trade & Industry in Spain. Peter regularly presents at public forum on the economics, markets and regulatory matters pertaining to climate change, clean energy and energy efficiency.

Katrina Managan

Katrina Managan is a Fulbright Scholar studying for an International MBA at IE Business School in Madrid, from which she will graduate in December, 2010. She is Vice President of the Energy club as well as the Vice President of the NetImpact Club. While studying, she co-authored the white paper on *Financing Energy Efficiency Retrofits in Buildings* with Climate Strategy and Partners.

Before coming to Spain, Katrina spent five years at the National Wildlife Federation (NWF) as their Senior Global Warming Legislative Representative. She was NWF's senior representative to Congress and Fortune 500 companies on energy and global warming.

Prior to that, Katrina worked with the Sustainable Energy and Economy Network, where she researched the energy lending policies of the World Bank, Export-Import Bank and other public financial institutions. Katrina received a B.A. in Politics with honors, a B.A. in Biology and completed the Environmental Studies Program at Brandeis University.

Gas Natural Fenosa, one of the sponsors

GAS NATURAL FENOSA is one of the leading multinational companies in the gas and electricity sector, is present in 23 countries and has more than 20 million customers.

Contact:

If you would like more information or to download a copy of the report please visit www.climatestrategy.es

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