

Making the renovation wave work: a Marshall plan for EU buildings in three simple steps

The EU's Renovation Wave strategy calls for the energy efficient renovation of 35 million buildings in the next decade with an estimated total investment need of Euro 900 billion. This requires a doubling of the headline buildings renovation rate of around 1% per annum. Presently, just one fifth of buildings renovations are designed to deliver substantial energy savings (over 60%): it is necessary to ensure that all buildings renovations deliver substantial energy savings, and to double the overall number of these deep renovations.

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Peter Sweatman, Chief Executive of Climate Strategy & Partners

The energy performance of most buildings in Europe is poor, and this doesn't have to be the case. Three quarters of European buildings were built before construction codes considered energy performance. These older buildings are a legacy which will remain standing well beyond the point at which our economy needs to be emissions negative. The EU's Renovation Wave strategy calls for the energy efficient renovation of 35 million buildings in the next decade with an estimated total investment need of Euro 900 billion. This requires a doubling of the headline buildings renovation rate of around 1% per annum, and the assurance that all renovations deliver sufficient energy savings to deliver Europe's energy and climate targets. Presently, just one fifth of buildings renovations are designed to deliver substantial energy savings (over 60%). The renovation wave needs

to ensure that all buildings renovations deliver substantial energy savings, and to double the overall number of these deep renovations. General Marshall might have outlined the renovate flagship challenge in our generation's European Recovery Plan in three simple steps: **Identification, Finance and Execution**. Working with policy support from EU institutions, and recovery funding, Member States need to match the right people, in the right buildings, to the right projects with the right mix of grants and finance – and ensure the renovation is “done right”.

Step 1: Identification

Identifying renovation wave targets requires the combination of two criteria: a building's physical state together with the occupants' eligibility for funding or financial support (through grants, loans and/or tax breaks). The general information on the physical state and

occupancy of buildings is good. The age, state, occupancy, ownership and fuel use (inter alia) of Europe's buildings are described in Member States' National Long-term Renovation Strategies. But how many of these building's owners, or renovation decision makers, know this? And if they do, do they know how to contract for a renovation, how much it will cost and whether they can get public support and if so, how to do it? Energy Performance Certificates (EPCs) are a partial answer to this lack of physical data and they make the building's performance more visible. Yet only 11 Member States upload their EPCs to a central database, and in far fewer are they made available to the owners and the renovation industry. Best practices in this regard can be found in the Netherlands, in the form of visualisation tools, and countries that provide certified renovation professionals confidential access to buildings energy data.

Vulnerable communities

Vulnerable communities, the energy poor and communities in transition need to be identified by the competent local authorities through a nation-wide exercise of priority identification through transparent grant eligibility criteria. Transparency is critical as grants can only be one component of the renovation funding package in most cases. Once the building and occupants' eligibility for support is identified, a technical solution (the renovation project) is required. While, average renovation costs are documented by Member State and by property type per square metre, a specific renovation project proposal is required which is competitive, will deliver the stated energy savings and that can be executed by a competent and trusted team. The identification and procurement of such a renovation project plan and associated competitive cost estimate is no small task and represents a significant hurdle for many would-be renovators. Germany has a network of over 10,700 Government accredited energy experts that work with state bank KfW, and Germany's energy agency DENA, that can prepare renovation plans. Like the UK's independent financial advisors (IFAs), these "independent renovation advisors" and project managers prepare a technical project, can arrange financing and are required to co-sign loans as testament to their inputs, interest and as a reference in case the project doesn't deliver. Importantly, the value and commitment delivered by these renovation project managers requires fair compensation. **This is why many building renovation stakeholders are calling for more project development assistance, as the technical project manager is often a critical, and yet overlooked, piece in the value chain to renovations.**

Step 2: Financing

Today, many building renovations are self-financed. Home improvements or boiler replacements are simply funded from savings accounts. However, the

deep renovations identified in the renovation wave will cost the same as a new car, and yet do not benefit from the myriad of competitive lease-finance packages that a car dealer can offer at the dealership. Nevertheless, monies will be available from Governments to promote deep renovation, for project development and to part-pay for the components whose returns take more time, like insulation. The question is: Where is the dealership for home renovations? And are they empowered to offer a fully blended package of grants and low-cost loans to finance an optimum energy efficient renovation? **Successful funders like KfW (in Germany), Kredex (in Estonia), VIPA (in Lithuania), the Czech Renovation Fund, and IDAE (in Spain) build a trusted network of agents and collaborators who are able to identify qualifying buildings renovation projects, undertake the work and provide the necessary information to apply for blended finance packages.** Each has a different and localised approach, but they boil down to identification, eligibility, a financed technical offer and high-quality execution. In many EU countries state banks and the EIB are working with local bank partners, yet the full power of retail facing mortgage lenders is yet to be fully engaged. If the EU Commission can borrow for 30 years at 0.4%¹, then citizens wishing to renovate their homes need to be provided with as attractive funding. € 20,000 borrowed at 0.4% today, paying zero interest for 30 years can be repaid in 2050 by returning € 22,500. A new, zero-coupon 30-year "renovation loan" instrument, if made available widely through retail banks to their customers maybe just the innovative renovation financing product that is missing. Secured on the property, junior to an existing mortgage, with no debt service for 30 years, this innovative renovation loan could deliver energy savings direct to household pockets and be part secured on the "green premium" resulting from a highly energy efficient hou-

se at sale or in the long-distant future. European residential buildings are estimated to be worth € 17 trillion² and are home to 220 million households. There are around € 7 trillion of mortgages³ in Europe, which leaves €10 trillion of home equity against which homeowners can borrow for deep renovation and to convert home equity into energy savings and local jobs. Borrowing against € 10 trillion of home equity (often belonging to the older generations) to stimulate jobs and lower on-going energy costs, secured against a green property with nothing to pay, except on sale, for 30 years seems like a road as yet untraveled in mainstream renovation markets.

Step 3: Execution

There are many testimonies to high quality deep renovations with satisfied customers, living more comfortably in healthier environments that cost far less to heat and light. Yet the risks of execution hassle and performance delivery remain hard to overcome. The miracle of lower bills, healthy living or even onsite power production is passed by word of mouth, and in renovation: seeing is believing. Retail business models expand virally with growth picking up in renovated communities, and – in some countries – by buildings literally changing colour. Building renovations have always been slightly ad-hoc. The renovation process, business model and finance supply chain is more complex than car purchase or mortgage finance, and there are fewer entities who offer pre-financed deep renovation packages in a way that's easy to understand and simple to execute. This is a particular challenge for the SMEs (employing less than 50 people each) that organise Europe's 18 million construction workers that contribute 9% to EU GDP. How many certified renovation project managers in local or regional buildings renovations firms are required? If a qualified renovation project manager could deliver ten deeply renovated buildings per year, then the renovation

wave of 35 million European buildings, over a decade, will require 350,000 accredited project managers. If Germany has 10,700, then it appears this maybe a capacity bottleneck across countries, yet if the project managers can expect to earn say 10% of executed projects then the size of the market for project management is Euro 9 billion per annum: Enough to get training for. Project managers and firms who successfully complete high performing energy efficient renovations and have satisfied customers need to benefit from publicity and a rating service that provides visibility to their achievements. **This can also help to create a drive for quality, stimulating innovation, accelerating the uptake of new smart technologies and materials to reduce renovation cost, improve execution processes and make success more evident and measurable.** Finally, to sell 15 million vehicles at Euro 30,000 each, on average, car com-

panies spend together over Euro 5 billion a year on advertising. My team was unable to find clear estimates of marketing spend for home renovations, but if we need a wave of 3.5 million sold at Euro 25,000 each, on average, each year, **significant resources will be required to inform European citizens of the benefits of getting involved.** It is unlikely that the hundreds of thousands of SMEs providing regional renovation will require national TV adverts, yet the offer of funded marketing spend to those companies which outperform or win local or regional prizes for excellence in deep renovation is another experiment yet to be fully explored. In 1947, at Harvard University, when describing the rehabilitation of Europe, George Marshall said “the problem is one of such enormous complexity that the very mass of facts presented to the public by press and radio make it exceedingly difficult for the man in

the street to reach a clear appraisal of the situation.” How prescient he was, as it seems he could have been describing how many Europeans view buildings renovation today. The Marshall Plan didn't seek to provide explicit solutions for Europe's post-war recovery, but it offered jointly developed policy recommendations, co-funding solutions and aid in a coherent package to stimulate Europe's economy. **There can be no doubt in 2020 of the European Commission's express intent and willingness, through its flagship recovery priority, to renovate European buildings and stimulate a European recovery with a package of jointly developed policies, co-funding solutions and aid. At an individual and collective level, once again, Europeans can reciprocate and make our renovation wave the priority challenge of this decade.**

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Biography - Peter Sweatman has spent 27 years in finance of which 17 are climate finance and energy efficiency. He is the Chief Executive of Climate Strategy & Partners, a strategic consulting group in Clean Energy, Clean Technology Innovation and Energy Efficiency working with leading companies and policymakers in the global energy transition. Peter is also Chairman and founder of Energy Efficiency Capital Advisors (www.eecapadvisors.com) an expert solution provider and finance structuring partner for over Euro 60 million of finance for energy savings and on-site power in Spanish cities.

Peter has published fifteen white papers and chaired, moderated or spoken at 357 conferences and workshops on the global energy transition to a climate neutral economy. Peter is a founder advisor to the Climate Bond Initiative, an active member of the Ashoka Support Network, advisor to the Climate Lab, Braemar Energy Ventures, rapporteur for EU Commission and UNEP FI's EEFIG and G20's EEFITG, member of the steering committee of the Global Alliance for Energy Productivity, Build-Up on and the Investor Confidence Project Europe, board member of Menorca Preservation Fund and visiting lecturer at IIT-Comillas university. Over the last 3 years, Peter has also developed an engaged interest in funding innovation for European decarbonisation since chairing and writing-up a 250-expert process to input to the design of the EU ETS Innovation fund and publishing a 2018 review of EU finance for competitive innovation for net-zero emissions by 2050. Peter holds an MA Cantab degree in Engineering and Management Studies from Cambridge University. In 1991, he joined JPMorgan in Corporate Finance where he spent 9 years responsible for client business, mainly in debt capital markets, for Spain, Portugal, Austria and Switzerland based in London and then for Mexico and other Latin American countries from New York. In the year 2000, Peter became a social entrepreneur to found three successful and high impact NGOs: Charity Digital (www.charitydigital.org.uk), New Philanthropy Capital (www.thinknpc.org) and Catalyst Climate Change Trust. From 2005, Peter was a Managing Director in Bunge-Climate Change Capital that was – from 2004-2010 - one of the world's leading specialist fund managers and advisors in the low carbon economy.

1. EC Investor presentation April 2020: https://ec.europa.eu/info/sites/info/files/economy-finance/eu_investor_presentation_en.pdf
2. Source of global figures, adjusted for population size and currency: https://internationalservices.hsbc.com/content/dam/hsbcis/pdf/HSBC_Global_Real_Estate_Report_July2017.pdf
3. Source Hypostat 2019: https://hyppo.org/app/uploads/sites/3/2019/09/HYPOSTAT-2019_web.pdf