

A €120bn investment program for the European Union 3-year Juncker Plan

Massive financing of the energy transition in schools, hospitals, etc. for a competitive EU

I. Background and issues

1. Prioritising the energy efficiency of public buildings as a quality investment

Since buildings represent 40% of energy consumption in Europe, they are a major segment of the energy transition, accounting for hundreds of billions of euros. The share of public buildings (excluding social housing) is estimated at around 10% of total surface area. The program builds on the duty of European, national and local authorities to set an example and stimulate quality investment. In Europe, public buildings (schools, offices, hospitals and so on) are estimated to be a largely untapped source of potential of financially sustainable renovation (entirely funded by energy savings as opposed to subsidies) of at least €120bn over the next 3 years, that is to say €100bn more than the current investment trend (BAU of €20bn or even less over the next 3 years). This untapped potential, which urgently needs to be more accurately assessed in the EU, is reason enough for a public intervention:

- the public finance situation is heavily constrained and could deteriorate in most European countries, hindering public building retrofit projects and lowering the BAU trajectory;
- public accounting standards in the EU and member states (MS) are a burden on these projects and their “conventional” financing mechanisms;
- project finance mechanisms remain ill-suited to these medium-sized operations;
- stimulating demand (currently weak and politically undervalued) calls for a clearly articulated long-term real estate strategy by MS and key projects to achieve it;
- current financing capacities and regulations would be insufficient for such a proactive policy.

The €120bn investment programme consists in financially long -or very long- term financially viable projects, with a 3% IRR objective.

2. Support of EU objectives

Energy renovations in public buildings would contribute to many EU goals:

- exemplary reduction of CO2 emissions in the context of COP21, in accordance with European targets¹;
- improvement of the EU’s highly skewed energy trade balance;
- energy independence²: the EU28 imports more than 50% of the energy it consumes and the Ukraine crisis is currently underlining Europe’s vulnerability;
- investment spurring the EU’s competitiveness: fossil-fuel imports represent more than €1bn per day but energy savings would enable the EU to use these resources to generate more added value.

According to economic estimates, investing €120bn over 3 years in public buildings would reduce their energy consumption by 10-15% and would reduce their CO2 emissions by the same percentage.

These French proposals respond to the need for long-term financing of the European economy³ focusing on the “real economy” without increasing the public debt, thus responding to today’s market failures. They will improve the traceability of that financing to facilitate safe and transparent monitoring of the scheme by public authorities.

3. Unrivalled socio-economic benefits

Energy renovations bring key non-financial socio-economic benefits besides those previously mentioned:

- local job creation, in part through SMEs: with about 15 jobs/year per million euros invested, a €120bn programme of investment in public buildings would result in more than 600,000 additional jobs/1year during 3 years;
- the development of an industry of excellence which would boost EU exports to globally expanding energy efficiency markets, which would also benefit energy efficient strategic programmes in residential buildings.

¹ European Commission. [2020 climate and energy package](#) and [2030 framework for climate and energy policies](#).

² Energy consumption for heating in public buildings: 50% gas and 20% fuel oil (France).

³ European Commission. [Communication on long term financing of the European economy](#). March 2014.

4. 3 years time horizon

It is estimated that €120bn of potential projects are already financially viable in the EU⁴. The level of readiness of member states may vary among them, but operations could be launched in most EU MS within a year. A dedicated task force will provide technical, legal and financial advice to some countries, so that operations could be started the following year.

5. Leverage

The financial mechanisms proposed are conceived in order to maximize leverage, with private financial entities benefiting from the EU guarantee: (i) banks first ; (ii) followed by institutional investors after securitisation.

6. Scalability

Between Y+4 and Y+10, there will be around €60bn of additional BAU and financially viable projects still available.

Besides, according to the study, there should still be a potential of +€240bn of non-financially viable projects, that could allow to reach more ambitious energy consumption and CO2 emissions reduction targets. In globo for a 420bn investment on 10 years (€120bn in 3 years, then +€60bn + €240bn), energy as well as CO2 reduction would reach -40% in these buildings. The minimum IRR would then be slightly negative at -3%.

II. A French proposal for an EU economic recovery plan

1. Financial, industrial and political tools

At the core of the scheme, the program will provide a high-quality guarantee (counter-guaranteed by the European Union)⁵ for dedicated loans by commercial banks. Given the intrinsic low-level of projects risk, the EU's guarantee will be a risk-sharing participation mechanism (junior capped guarantee at 10% of the loan). The implementation will be entrusted to the EIB by means of indirect management. The EU's guarantee (with payment of a commission fee by banks) is necessary in order to improve the investment climate and enable the creation of a new market of green securitised assets. The level of guarantee should decrease in the medium term, with an improving appraisal of the low level of intrinsic risk by financial markets and rating agencies. Simple, transparent and safe securitisation will enable the refinancing of these very long-term loans, - high-quality "green bond" infrastructure assets -, by the EIB and by institutional investors.

2. Energy Performance Contracting (EPC) as a key public policy tool

EPC is perfectly adapted to investment in the energy renovation of public buildings. It is based on a contractual commitment to achieve a given energy-efficiency target, subject to actual and systematic *ex post* monitoring. The program proposes several adaptations to EPC that will increase its integrity and enable to justify European and national investment through demanding impact assessments. Moreover, EPC benefits from strong European support ("EPC Campaign" of DG Energy, Energy Efficiency Directive, IEE, JRC work on the ESCOs market, EESI 2020, etc.). In a nutshell, the French proposal represents a shift from tailor-made to standardised, ready-made EPC projects, for wide-scale use with the help of the EU guarantee.

3. A massive impact without increasing the public debt

The programme will benefit from: (1) an off-balance sheet EU guarantee and (2) the funding of projects under EPC partnerships (PPP-EPCs) that really transfer a significant level of risk to private operators or semi-public companies. This program needs for a technically limited evolution of the European accounting framework so as to better adapt it to energy-efficiency improvement projects: the accounting of PPP-EPCs outside the scope of public debt is paramount to bringing about a change of scale in Europe.

On the basis of a 10% junior guarantee, the capped guarantee for +€100bn projects would amount to €10bn. Given that the intrinsically low level of risk being guaranteed consists mainly in default risk of governments and local authorities, risk weighted assets (RWA) calculations should imply a very low level of equity.⁶

⁴ Estimate based on France case study: €20bn of financially viable projects in 2014, for a €1bn BAU. Factor 6 multiplier for EU/France.

⁵ See the PF4EE (Private Financing for Energy Efficiency instrument) initiative.

⁶ without taking into account the capped guarantee mechanism ; nor the State/local authorities buildings shares ; a [2%-20%] RWA on 8% for €100€ of guaranteed risks would give a [€0.16bn - €1.6bn] target. €400m of capital should be an accurate estimate.

III. The proposal of a quality investment program for an EU economic recovery plan

A strong commitment from European and national public authorities

The program requires a strong mobilisation of public authorities in the EU and Member States. Their commitment is essential to improve public project management capacity, pool operations, promote economies of scale, standardise projects, and ultimately to significantly increase the volume of operations. "Governments should build public sector institutional capability in project development and implementation, and foster greater knowledge sharing and transparency across levels of government, jurisdictions, the private sector and other stakeholders."⁷ In addition, energy savings performance commitments will provide for reliable and demanding public policy assessments.

The programme should be widely publicised to make it easier for local elected representatives to politically promote their energy efficiency projects.

IV. EU NEXT STEPS

The project now requires a strong mobilisation of all stakeholders, especially from European and MS public authorities.

1. European Union

- Public buildings selected as a quality investment programme for the EU
- Creation of a dedicated task-force by the Commission ; technical assistance programmes to MS
- Creation of a European knowledge-sharing platform: observatory network on energy expenses, renovations, EPCs, costs/savings, RFPs, energy-efficiency techniques, etc.
- Fine-tuning of the Eurostat methodology to enable an accurate treatment of PPP-EPCs
- Specific business plan and creation of the program: bylaws, analysis of existing national state-guarantee mechanisms, potential shareholders, governance, team, regulator approval, etc.
- EIB intervention and balance sheet optimisation: loans, equity, expertise, etc.
- Calibration and assessment of the intrinsic level of risk in operations: National Central Banks & ECB

2. National public authorities

- National public building guidance and appraisal strategy ; strengthening of public project development capacity
- Massive pipeline of projects selected and budgeted by national and local authorities, based on consumption track-records
- Projects implementation (PPP tenders) ; and evaluation and audit of projects (especially in EPCs)

3. Industry players, SMEs, banks and institutional investors

- Ramp-up of operations, productivity gains and development of a European industry
- Securitisation Funds bringing together energy efficiency medium-sized projects for investors

⁷ G20. [A set of Leading Practices on Promoting and Prioritising Quality Investment](#). September 2014.