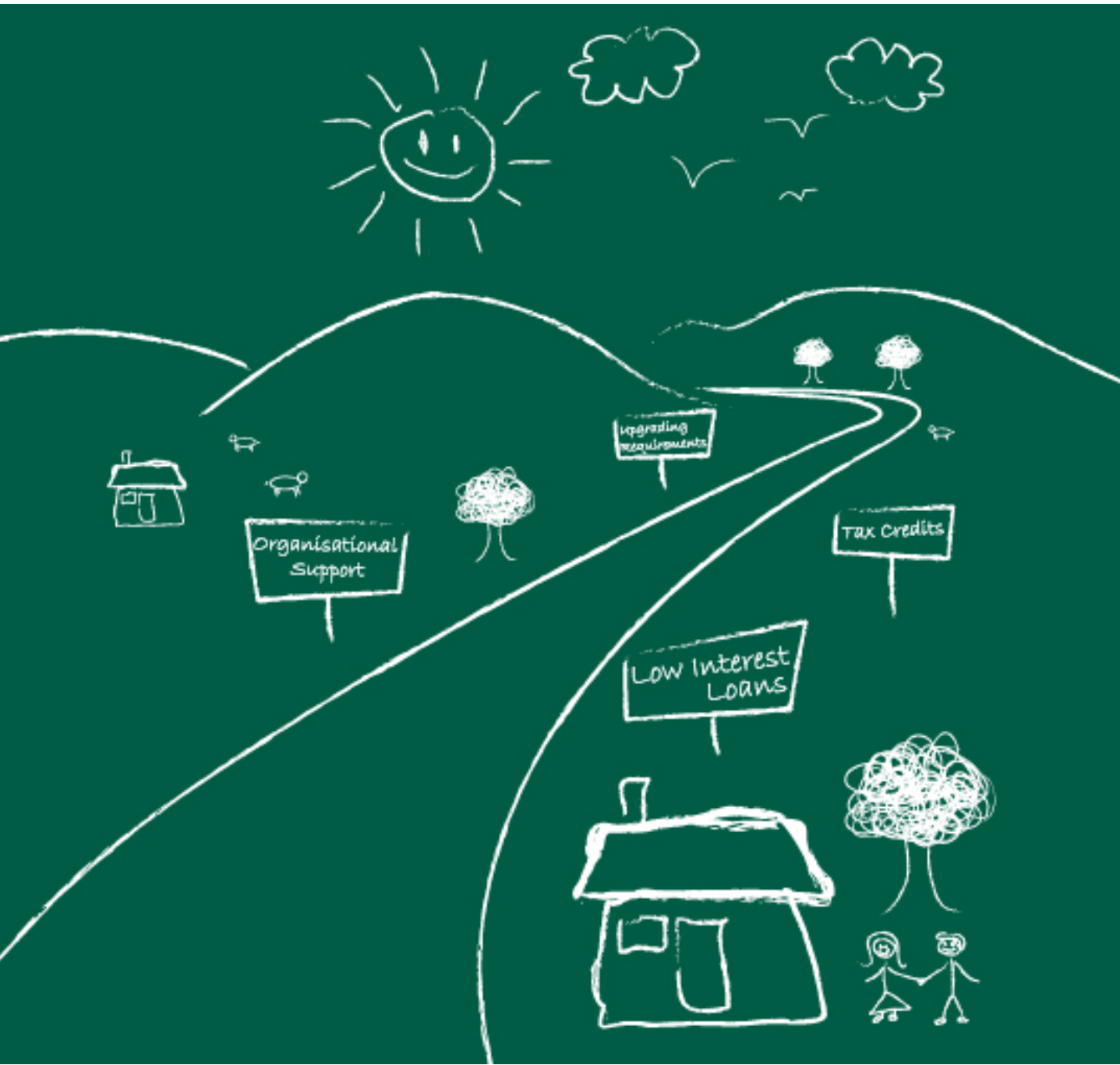
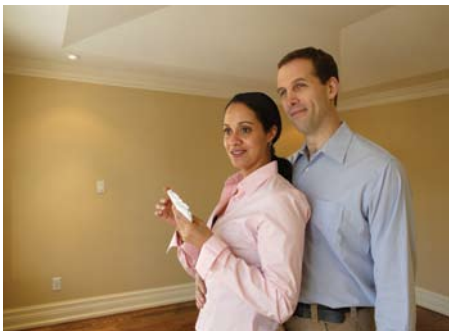
BETTER BUILDINGS THROUGH ENERGY EFFICIENCY

A Roadmap for Europe



CLIMATE CHANGE AND THE NEED FOR ENERGY SECURITY REQUIRE RADICAL ACTION. BUILDINGS ARE AN IMPORTANT PART OF THE SOLUTION. **BETTER BUILDINGS THROUGH ENERGY EFFICIENCY** BUILDS ON BEST PRACTICE EXAMPLES TO PRESENT A PRACTICAL ROADMAP AIMED AT HARNESSING THE HUGE POTENTIAL THAT EXISTS IN BUILDINGS.



THE NEED FOR BETTER BUILDINGS

CLIMATE AND ENERGY SECURITY

Europe is facing an enormous challenge over the next decades to find ways of ensuring climate and energy security, whilst remaining competitive in a global economy. Increasing evidence that global warming is already upon us and that, through our own actions, we are moving towards a potentially catastrophic tipping point, intensifies the need for immediate action.

THE ROLE OF BUILDINGS

Within this debate, the huge potential of energy efficiency in buildings has been recognised. Not only could over 20% of Europe's **total energy use** be reduced by improvements in buildings, but the saved energy costs would amount to €270 billion a year. In terms of the climate, this is a reduction of 460 million tonnes of CO_2 per year, an amount greater than the EU's Kyoto commitment.

SEIZING THE POTENTIAL

Although the potential has been recognised, policy makers from the EU, right down to local levels, often remain unsure of how it can be harnessed. There are many available instruments, including financial tools, information and awareness-raising campaigns, public-private and public partnerships, institutional strengthening and capacity building, but which of these tools or combinations of tools should policy makers apply?



MAKING BETTER BUILDINGS A REALITY

Identifying tools that work

To develop a roadmap for energy efficiency, the study "Better Buildings Through Energy Efficiency: A Roadmap for Europe" first delved into the myriad of practices from across the EU and beyond, investigating both new and existing buildings, as well as different tenure situations (i.e. owned, rented, government-occupied). An analysis was conducted of a number of successful schemes in an attempt to understand what had made them successful.

Best practice not best practices

The objective of the study was not to provide an overview of best practices from across the EU, but rather to identify elements that are essential to delivering real improvements across a range of building types and tenure situations. Its purpose was to try to identify core elements that made schemes successful and establish whether, if applied elsewhere, they would have the same impact.

From best practice to prototype instruments

By examining best practice examples to determine these core elements, it soon became apparent that there are underlying principles that can be applied to different situations. These were termed prototype instruments.

These prototype instruments fall into four main categories:

- regulatory (e.g. legal norms)
- economic (e.g. low interest loans)
- communicative (e.g. energy audits)
- organisational (e.g. help desks)

The study used these prototype instruments to analyse best practice examples, in order to understand which combination of instruments is needed for a given building type and tenure situation.

Creating a roadmap

The last step was to move from prototype instruments to specific policy packages for given building types and tenure situations (e.g. owner-occupied, existing residential buildings).

To do so, the study examined the different barriers to energy efficiency in buildings and considered which combinations of prototype instruments could be used to overcome these barriers.

By using best practice examples, in association with this analysis, it was then possible to suggest policy packages for different settings.

Interestingly, the analysis demonstrated that, although different packages are needed for different types of buildings and tenure situations, regional differences seem to be of little importance.

THE ROADMAP FOR BETTER BUILDINGS RECOMMENDS SPECIFIC POLICY PACKAGES, SHOWING WHICH INSTRUMENTS CAN WORK TOGETHER TO ADDRESS A SPECIFIC SETTING

SUGGESTED POLICY PACKAGES BY SECTOR AND TENURE

	New buildings	Existing buildings
Residential buildings		
Owner-occupied		
Private rental		
Social rental		
Commercial buildings		
Owner-occupied		
Private rental		
Public buildings		
Owner occupied		

Key to table above:

Preferential loans for significant energy performance combined with energy audits and organisational support	Mandatory performance evaluations combined with regulatory benefits for above-standard performance	Energy upgrading requirements combined with energy audits and organisational support	Tax credits for installing energy-saving products (for landlords) combined with energy audits and organisational support	Energy upgrading requirements	Above-standard requirements for government buildings, combined with energy performance contracting



MAIN FINDINGS

1. It can be done

The study clearly demonstrates that, for all situations, an appropriate combination of policies can deliver significant improvements, even in the more problematic tenant/landlord situation.

2. Tenure matters, regions don't

Surprisingly, the combination of elements needed to deliver important changes across the EU is practically the same throughout, while the instruments required may differ. For example, upfront financing may be provided by local governments in the UK, but through structural funds in Poland. However, the tenure situation (private/public) and type of building calls for different combinations of instruments.

3. Barriers must be addressed

A lack of adequate barrier analysis at the beginning of projects is far too common across Europe. It is also a key element in their failure or lack of delivery of better results. The study demonstrates that each tenure and building type has a specific set of barriers that must be addressed by the right group of instruments, tailored to the local environment.

4. Help me, don't tell me

Information alone yields limited results, especially if it is not specific about what needs to be done in a building. While awareness of the need to act is high, what is missing is practical information about how to renovate a building and where to find the organisational support to deliver improvements. Schemes that provide organisational support are by far the most successful, particularly for renovation of existing residential buildings.

5. Up front money is needed

Loan schemes, which provide a building owner with the means to invest in building improvements without having to use cash resources, are more effective and efficient than most subsidy plans. Again, financial schemes and other incentives work best when supported by organisational structures.

6. Tax credits are helpful

Landlords and commercial building owners have difficulty securing sufficient benefits from building improvement investments. Tailored tax breaks improve the cost/benefit ratio for building owners, and ensure that landlords, as well as tenants profit from investments.

7. Organisational structures are key

The study underlines that, although highly demanding in terms of institutional capacity and upfront investment, organisational structures are the key to success in most tenure situations. They offer invaluable support in terms of knowing what to do, how to do it and ensuring it is properly done.



RECOMMENDATIONS FOR SECTOR-SPECIFIC POLICIES

EXISTING RESIDENTIAL BUILDINGS

- Promote preferential funding or loan schemes
- Remove the 1 000 m^2 threshold on renovation of existing buildings in the Energy Performance of Buildings Directives (EPBD)
- Extend the EPBD to cover renovation of components
- Extend the EPBD to cover follow-up of audits
- Promote organisational support schemes

NEW RESIDENTIAL & COMMERCIAL BUILDINGS

- Set minimum and high performance levels
- Promote incentives for above-standard buildings

EXISTING COMMERCIAL BUILDINGS

- Promote energy upgrading requirements

PUBLIC BUILDINGS

- Promote above-standard requirements

This leaflet presents results from the report 'BETTER BUILDINGS THROUGH ENERGY EFFICIENCY: A Roadmap for Europe' produced by Klinckenberg Consultants for Eurima, as part of the Eurima Blueprint Project
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