

Barriers and Solutions

Despite energy efficiency in buildings being an obvious “win/win” it clearly has not been happening at sufficient speed and depth to enable the EU to meet its policy objectives. **The priority areas are:**

- **Political will.** Improving the energy efficiency of buildings needs to be integrated into a whole raft of policy areas. It is through political intervention that we can achieve the step change in the performance of buildings that Europe so desperately requires.
- **Mandatory targets.** History shows that vigorous action rarely takes place at Member State level unless targets are imposed. It is essential that national compulsory targets are set, specifically for the energy efficient refurbishment of buildings.
- **Financial support.** Mechanisms must be introduced to channel EU funding to the end user, and to increase the use of fiscal instruments by Member States. Research shows that well-constructed schemes to incentivise energy saving are more cost-effective to Member States than increasing energy capacity.
- **Enforcement of legislation.** Transposition of EU Directives into national law is frequently inadequate and timetables not met. Firmer scrutiny by the European Commission is needed, including sanctions. Member States likewise need to enforce their laws more rigorously, with controls and sanctions put in place.
- **Communication, motivation and education.** Building owners remain largely unaware of the potential economic benefits of improving energy efficiency. Imaginative communication strategies are needed to stimulate awareness, motivate and inform. Above all, improving buildings should be seen as a desirable and responsible thing to do.

With full commitment in these areas by the EU institutions and Member States, we can achieve the substantial improvement in the energy efficiency of our buildings that is already technically possible.



Of Europe's existing buildings, only about 1.2% are renovated and about 0.1% demolished in any given year. Even if all the buildings being renovated incorporated the highest standards of energy efficiency, this rate is insufficient to meet the EU's energy saving targets for 2020.

Two important things need to happen if this situation is to be corrected.

- First, whenever building renovation takes place, all available energy saving technologies must be incorporated. This “deep” renovation can achieve a reduction in energy consumption of between 60% and 90%, for the majority of Europe's buildings.
- Second, the annual rate of renovation of Europe's buildings must be tripled before 2020.

With an unwavering political commitment over this timescale, the energy efficiency industry can deliver.

*The political vision, commitment and roadmap for delivery are urgently needed. With these, Europe can achieve its energy-related policy targets. Together, we can **RENOVATE** EUROPE, a EuroACE campaign to triple deep renovation rates for buildings.*

EuroACE, the European Alliance of Companies for Energy Efficiency in Buildings was formed by Europe's leading companies involved with the manufacture, distribution and installation of a variety of energy saving goods and services.

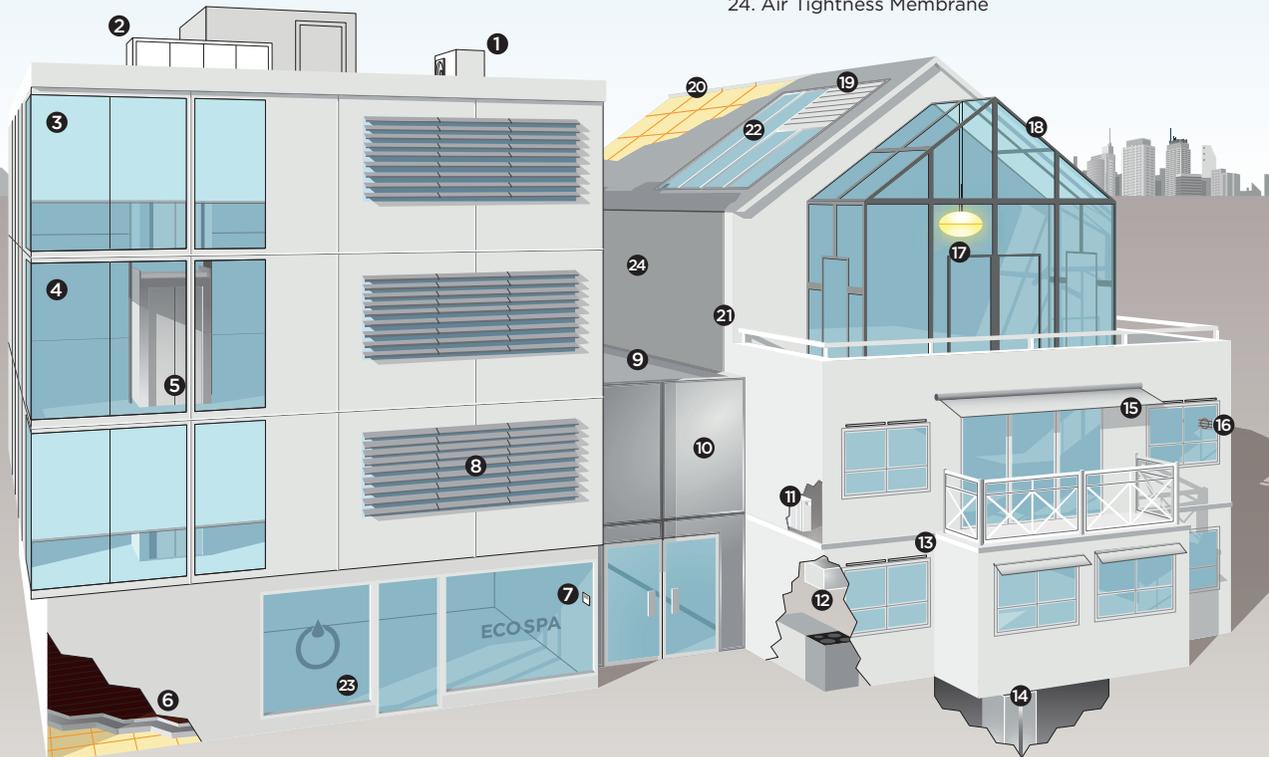
The mission of **EuroACE** is to work together with the European institutions to help Europe move towards a more sustainable pattern of energy use in buildings, thereby contributing to the EU's commitments on carbon emission reductions, job creation and energy security.

ENERGY EFFICIENCY IN BUILDINGS
The zero cost route for Europe to achieve its energy-saving, climate change, economic and energy security goals



Technologies for improving the **Energy Efficiency of Buildings** exist today providing a negative cost solution for building owners across Europe.

1. Air Cooled Chiller
2. Heat Pump
3. Automated Roller Blind
4. Glazing
5. Regenerative Drive Elevator
6. Floor Insulation
7. Heating Controls: Room Thermostat
8. Automated Exterior Venetian Blind
9. Insulation
10. Insulated Wall System
11. Heating Controls: Radiator Thermostat
12. Heat Recovery Ventilation
13. Humidity Sensitive Air Inlets
14. Heat Pump
15. Automated Roller Blind
16. Humidity Controlled Extract Unit
17. Lighting
18. Sunspace
19. Automated Awning
20. Insulation
21. Sealants
22. Roof Window
23. Solar-control/ Low E-window Film
24. Air Tightness Membrane



Energy Efficiency in Buildings should be central to EU policies

Energy efficiency is key to delivering so many of Europe's economic, security, energy, environmental and social policy objectives.

Buildings have the biggest role to play. Buildings consume more energy than does any other sector, yet the realistic potential for energy savings in buildings is huge.

These savings are deliverable economically. Using energy saving materials and technologies which are readily available now, most buildings could reduce their energy consumption to a fraction of current levels.

Improving the energy efficiency of buildings:

- **Increases energy security**, by reducing our demand for imported energy.
- **Assists in economic regeneration**, by requiring less expenditure on fuel.
- **Achieves climate change objectives**, through lower carbon emissions.
- **Creates employment**, by increasing local and SME jobs to install measures.
- **Reduces fuel poverty**, by reducing the cost for the poor to heat their homes.
- **Improves the quality of the environment**, because buildings become more habitable, comfortable, attractive and easier to maintain.

EuroACE, the European Alliance of Companies for Energy Efficiency in Buildings is comprised of Europe's leading companies involved with the manufacture, distribution and installation of a variety of energy saving goods and services. The EuroACE member companies together employ 172.000 people and have a turnover of 140 billion euros.

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EuroACE Members:

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Aereco

Armacell International

PU Europe

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Honeywell Europe

Johnson Controls

Kingspan Insulated Panels

Knauf Insulation

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Philips Lighting

Pilkington

Rockwool International

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United Technologies

URSA Insulation

The VELUX Group