

**International Symposium (IEA-MLIT-METI-MoE-JSBC)
Energy Use and Green Buildings After Great East Earthquake in Japan
Tokyo, February 25th**

**The IEA's paradigm shift to achieve
low-energy and low-carbon buildings stock**

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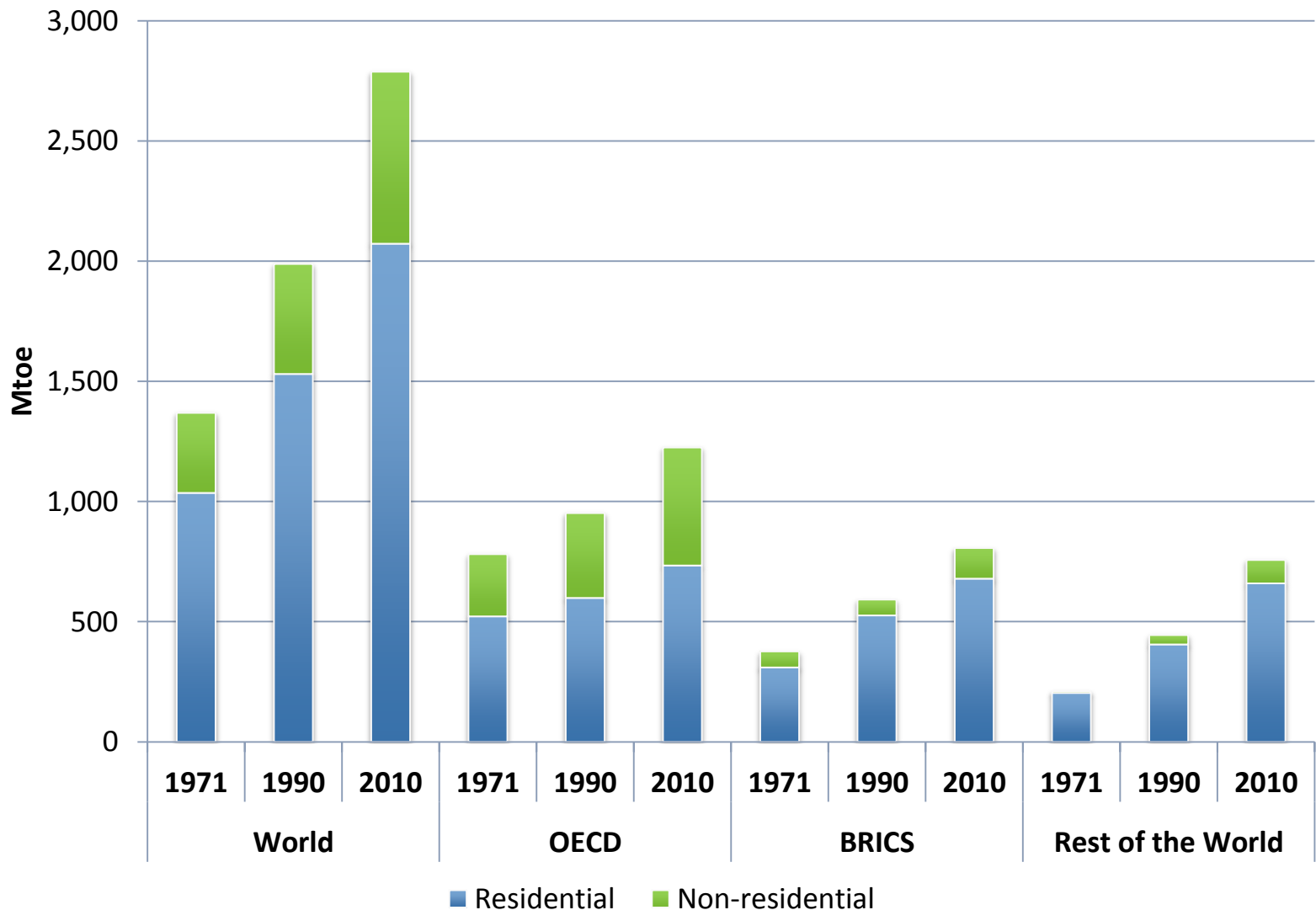
International Energy Agency

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**International
Energy Agency**

Final energy consumption in the buildings sector has grown across the world over the past 40 years



Three main policies implemented in IEA countries to tackle buildings energy consumption

■ Building energy codes

Mandatory Minimum Energy Performance Requirements for the overall building and for each building component and equipment

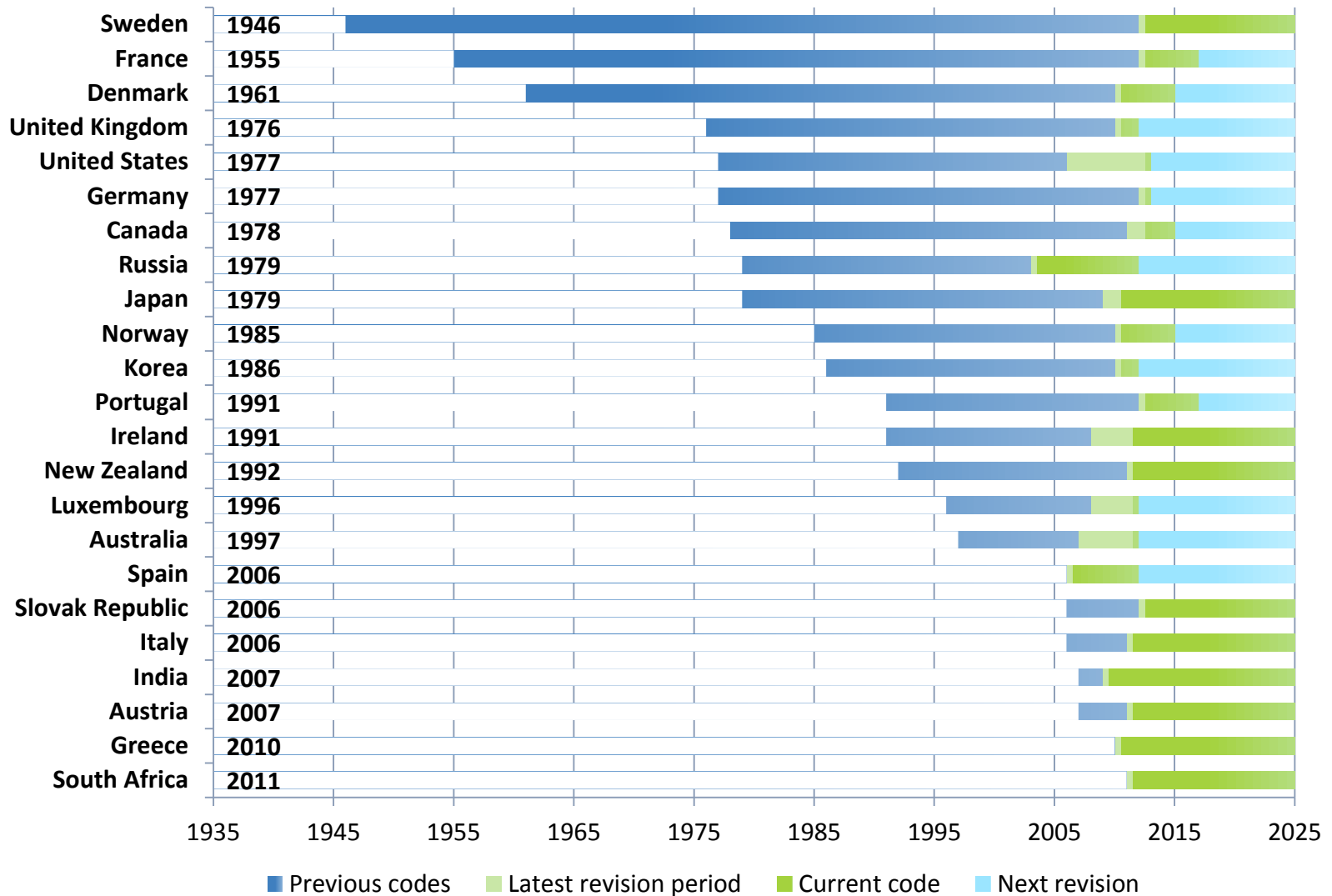
■ Labelling scheme

Information instrument to create market value for low-energy and low-carbon buildings

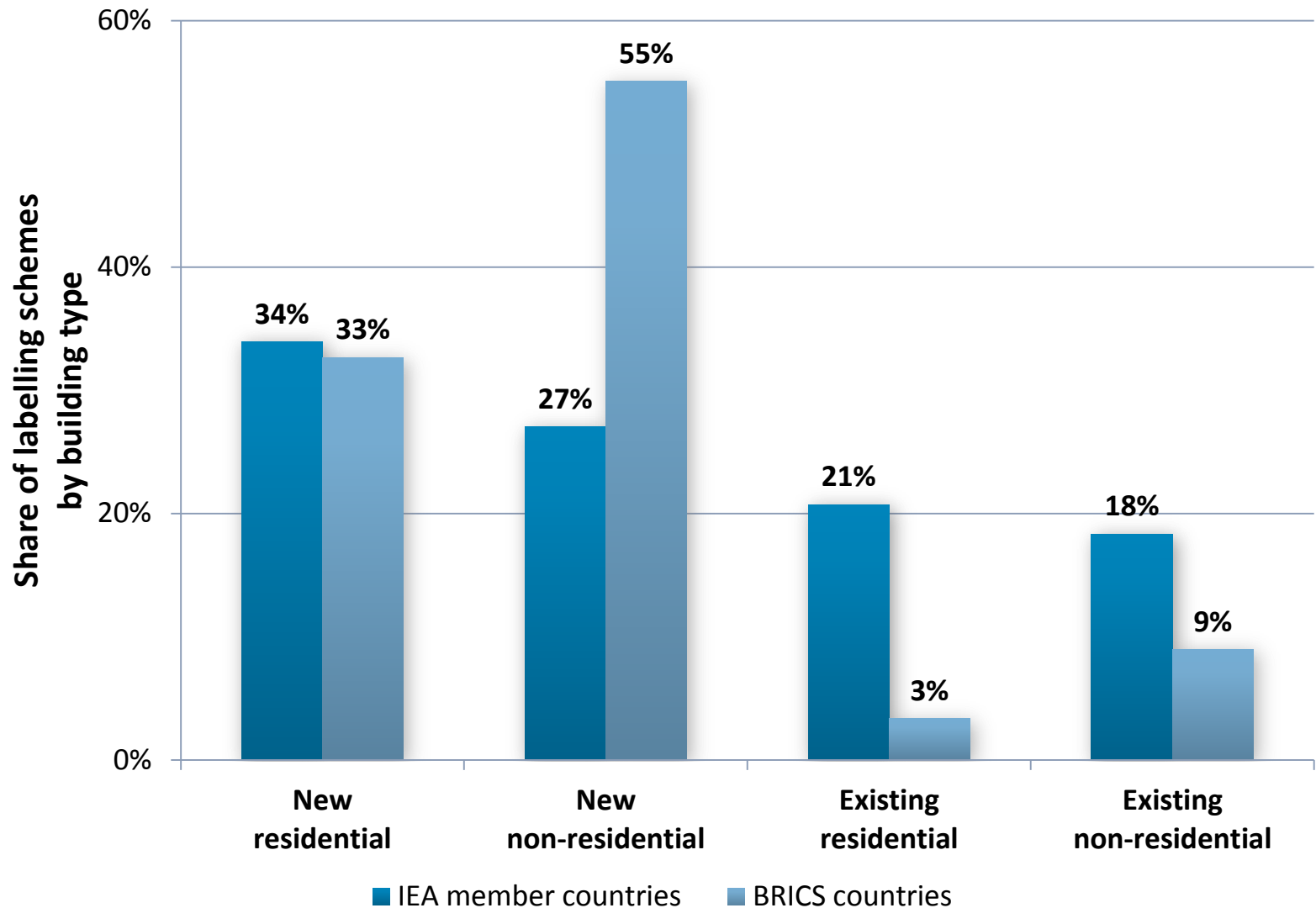
■ Incentive schemes

Policy instrument to address the up-front investment challenge

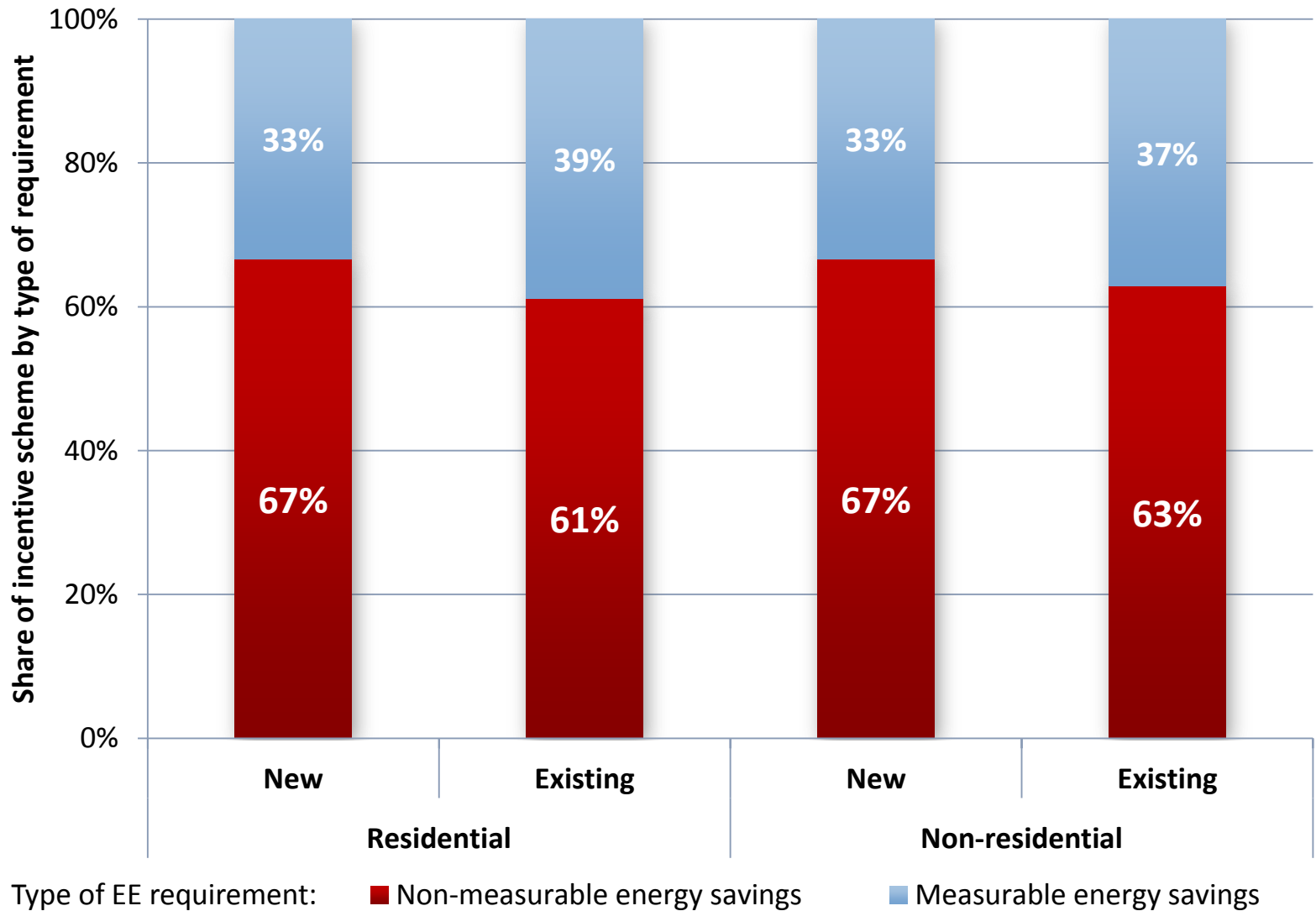
Building energy codes need to be dynamic and regularly updated



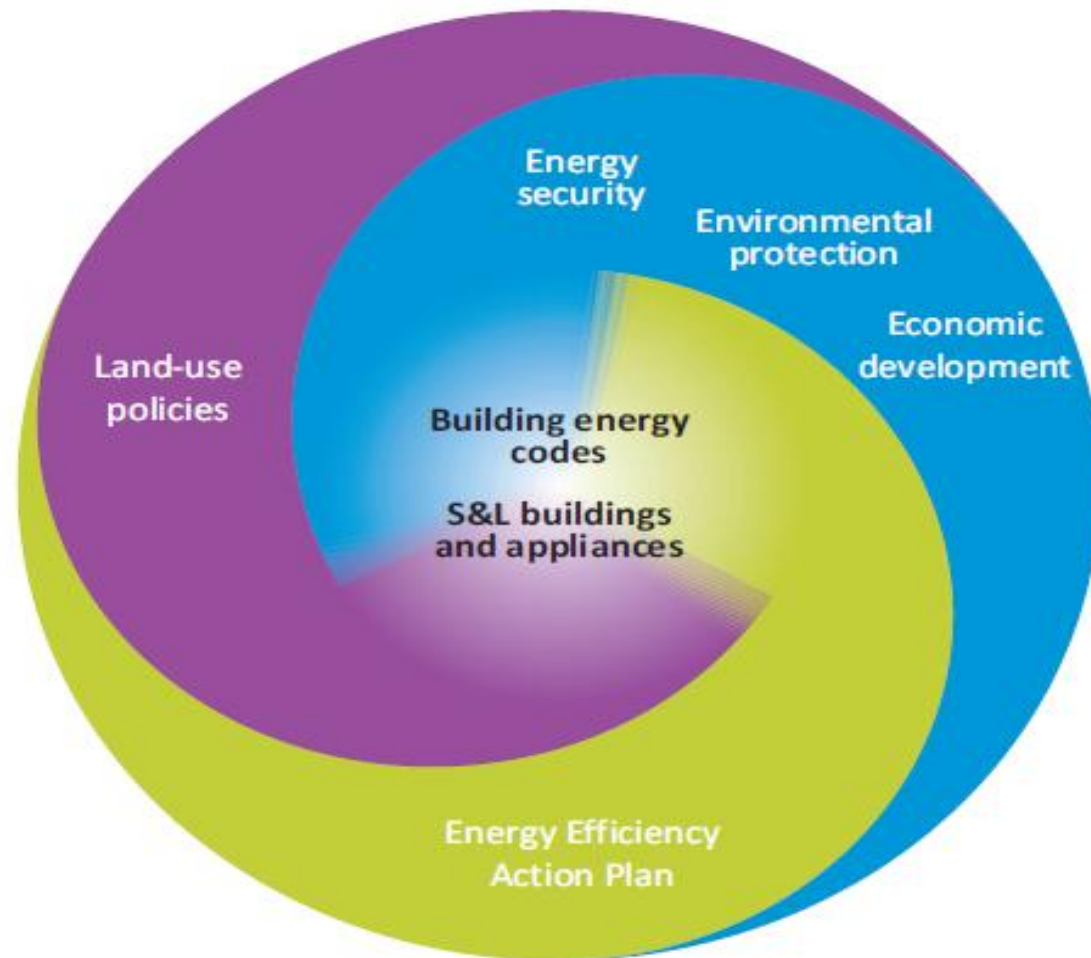
Labelling schemes are focused on new buildings in most countries



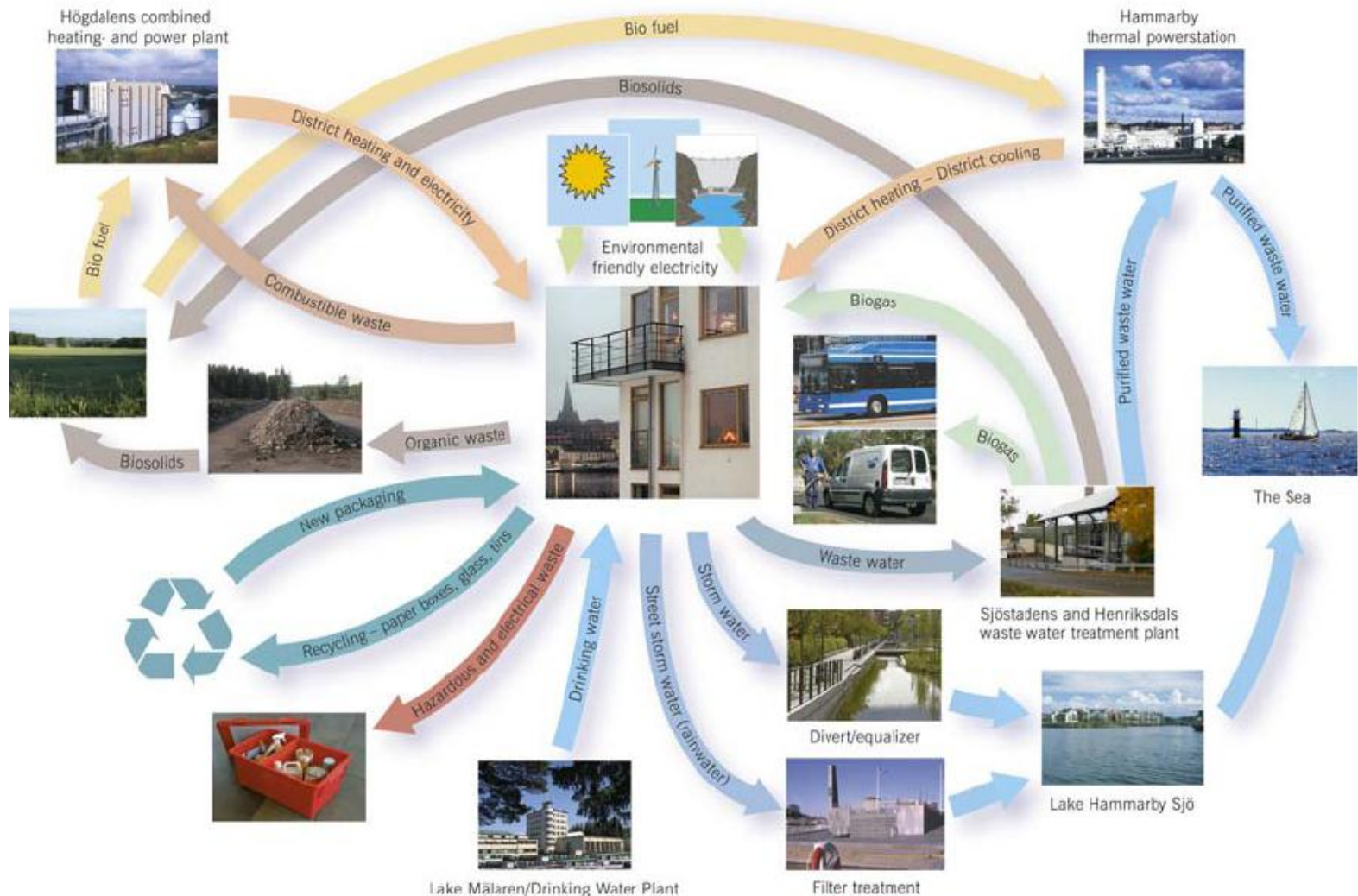
Most incentive schemes are not tied to measurable energy efficiency measures



The need for a holistic approach that goes beyond buildings energy policies



Low-energy and low-carbon buildings stock is technically and economically achievable

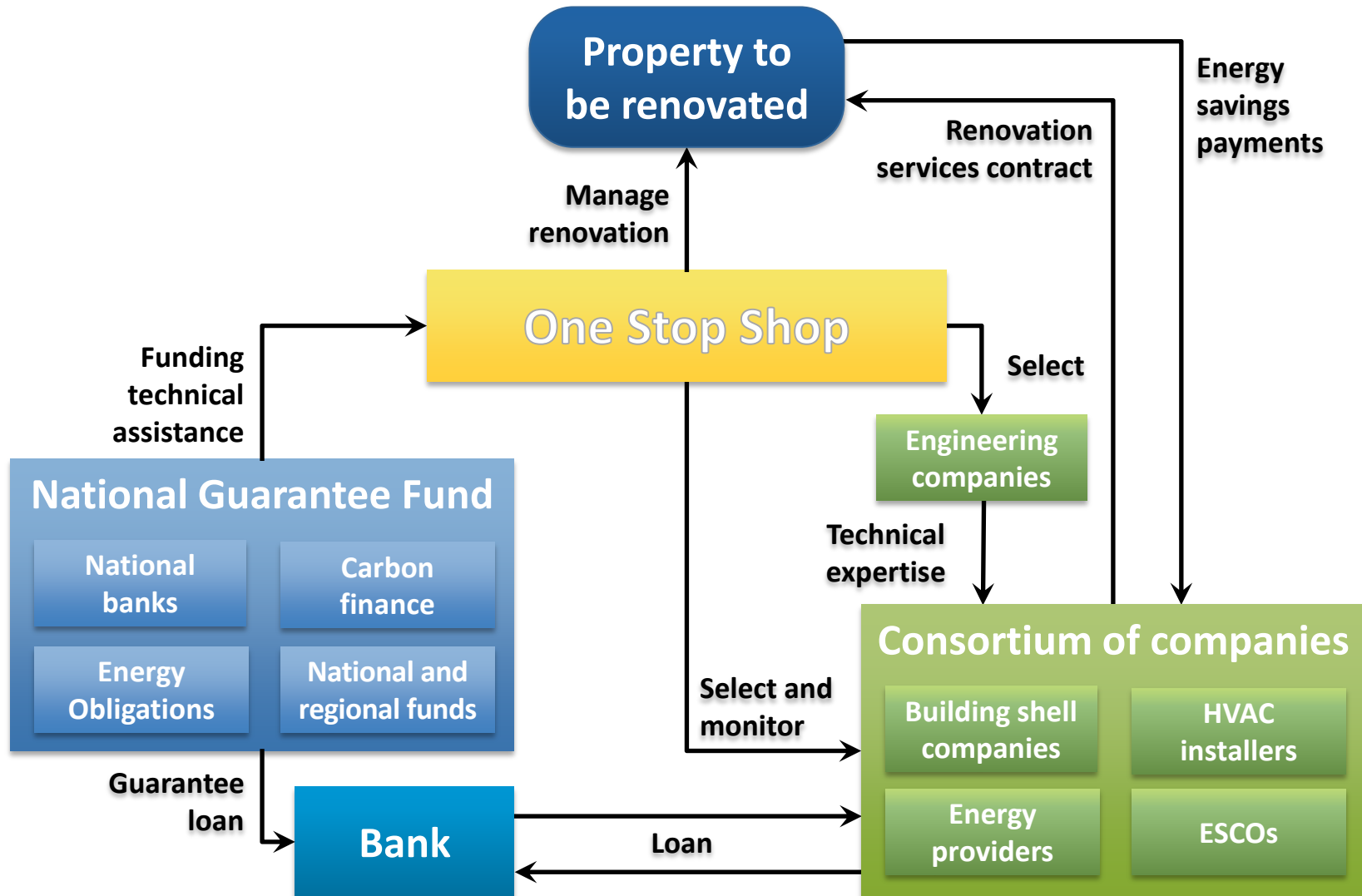


Source: Hammarby Eco-cycle

It is time for a paradigm shift: low energy buildings meet essential needs and secure our future

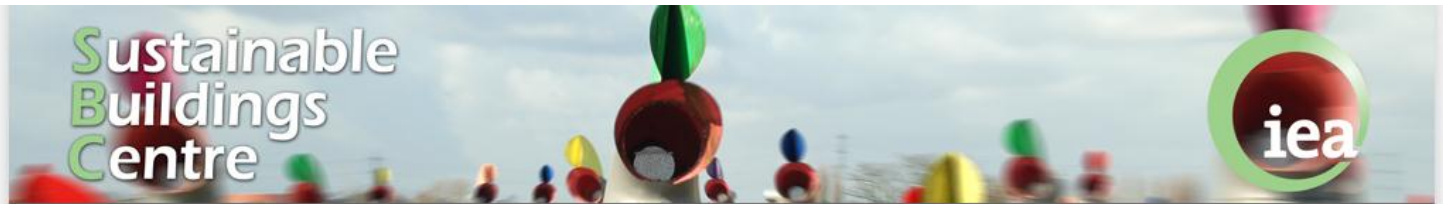
- **Shift** from single building to overall building stock
- **Objective: low energy building stock** by 2050
- **Mandatory** energy renovation rate
- **National renovation guarantee fund: one single fund**
 - Technical assistance
 - Establishing guarantee systems
 - Stimulating private sector
- **Renovation services contracting**
 - One-stop shop
 - Overall performance-based approach to estimate renovation deepness
 - Clusters of companies
 - Guaranteed results
- **Monitoring and compliance** checking

SBC Market framework proposal to Low-energy and low-carbon building stock





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The IEA Sustainable Buildings Centre is the online voice for low energy buildings

Germany
Building Energy Code

Category	RESIDENTIAL		NON-RESIDENTIAL		Country
	NEW	EXISTING	NEW	EXISTING	
Regulatory	Energy Conservation Regulations (EoEV)				Germany
Chronology	First version		1977		Germany Denmark Building Codes Labels Inclusive Schemes Zero Energy Buildings Download as an Excel file
	Current version		2012		
	Next revision		Not available		
Development	Development	Federal Institute of Transport, Building and Urban Development; Federal Agency of Energy and Technology			Austria Austria Belgium Brazil Canada China Czech Republic
	Implementation	Federal states			
	Verification	Building control authority (local level)			
	Enforcement	Building control authority (local level)			
Compliance path	Prescriptive				
Enforcement	Permits type				
	Fines	Yes			
	Demolition	No			
	Information	Yes			



China
Labels

Category	RESIDENTIAL		NON-RESIDENTIAL		Country
	NEW	EXISTING	NEW	EXISTING	
Regulatory	Passive House				China Croatia Labels Download as an Excel file
Chronology	First version		1990		Austria Austria Belgium Brazil Canada China Czech Republic Denmark Finland France Germany Greece Denmark Energy performance Canada Croatia
	Current version		1990		
	Next revision		Not available		
Development	Development	Institute of Building Energy Efficiency			Austria Austria Belgium Brazil Canada China Czech Republic Denmark Finland France Germany Greece Denmark Energy performance Canada Croatia
	Implementation	Institute of Building Energy Efficiency			
	Verification	Institute of Building Energy Efficiency			
	Enforcement	Institute of Building Energy Efficiency			
Compliance path	Passive House Planning Package (PHPP) Version 7 (2010) - EN				
Enforcement	Not present				
Compliance Software	Passive House Planning Package (PHPP) Version 7 (2010) - EN				
Certification Methodology	Calculated energy performance				
Scope	Not in scope				

Events



Energy Transition, Seminar of the Energy Center, Ifri

Paris, 12 October 2012

[See all events](#)

Publications



25 Energy Efficiency Policy Recommendations (2011)

[See all publications](#)