

20TH GLOBAL CONFERENCE ON ENVIRONMENTAL TAXATION
"Economic Policies for Low-Carbon Development"



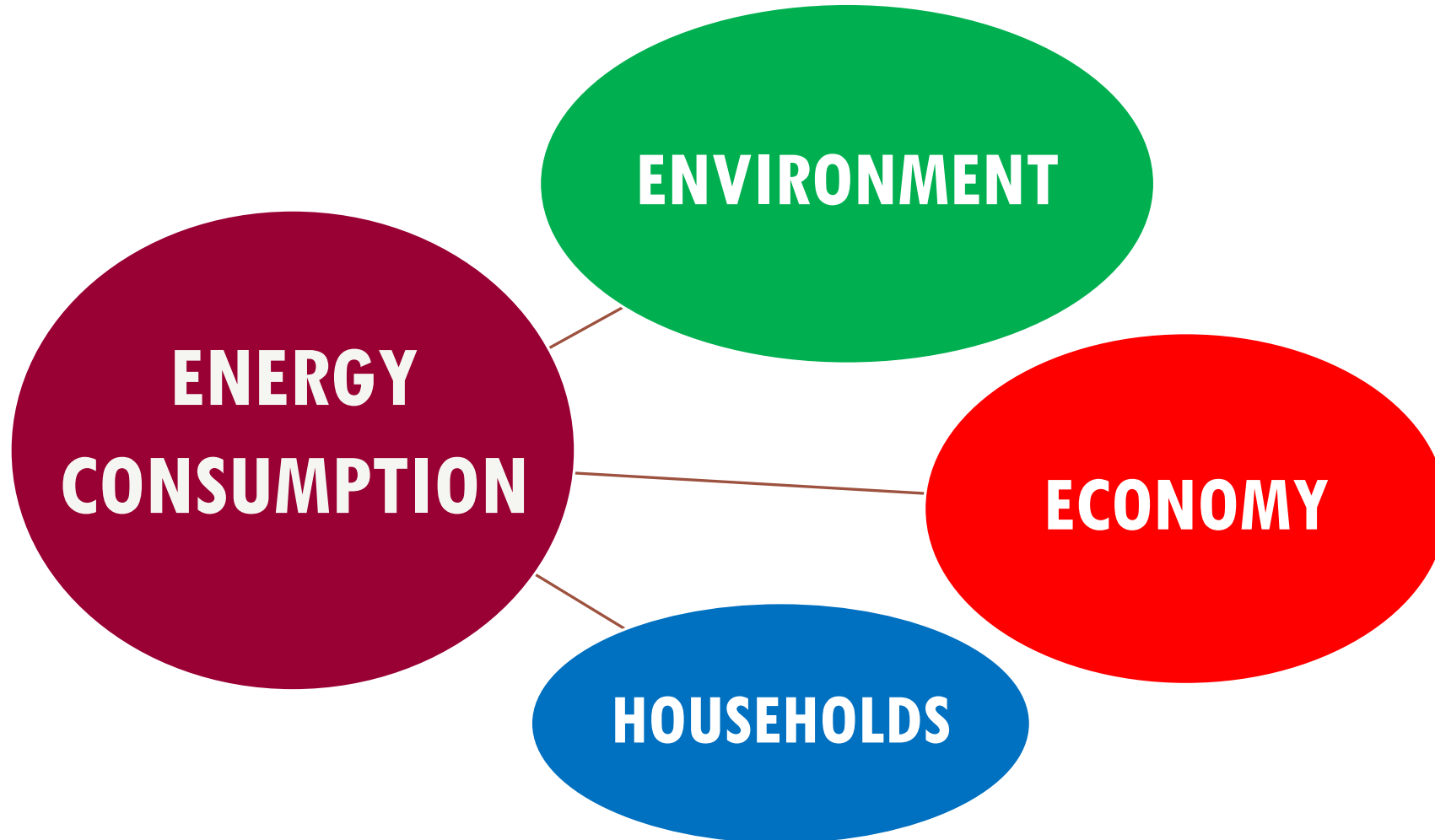
**AN INNOVATIVE USE OF THE TAX
COLLECTION SYSTEM TO
PROMOTE ENERGY EFFICIENCY
IN BUILDINGS**

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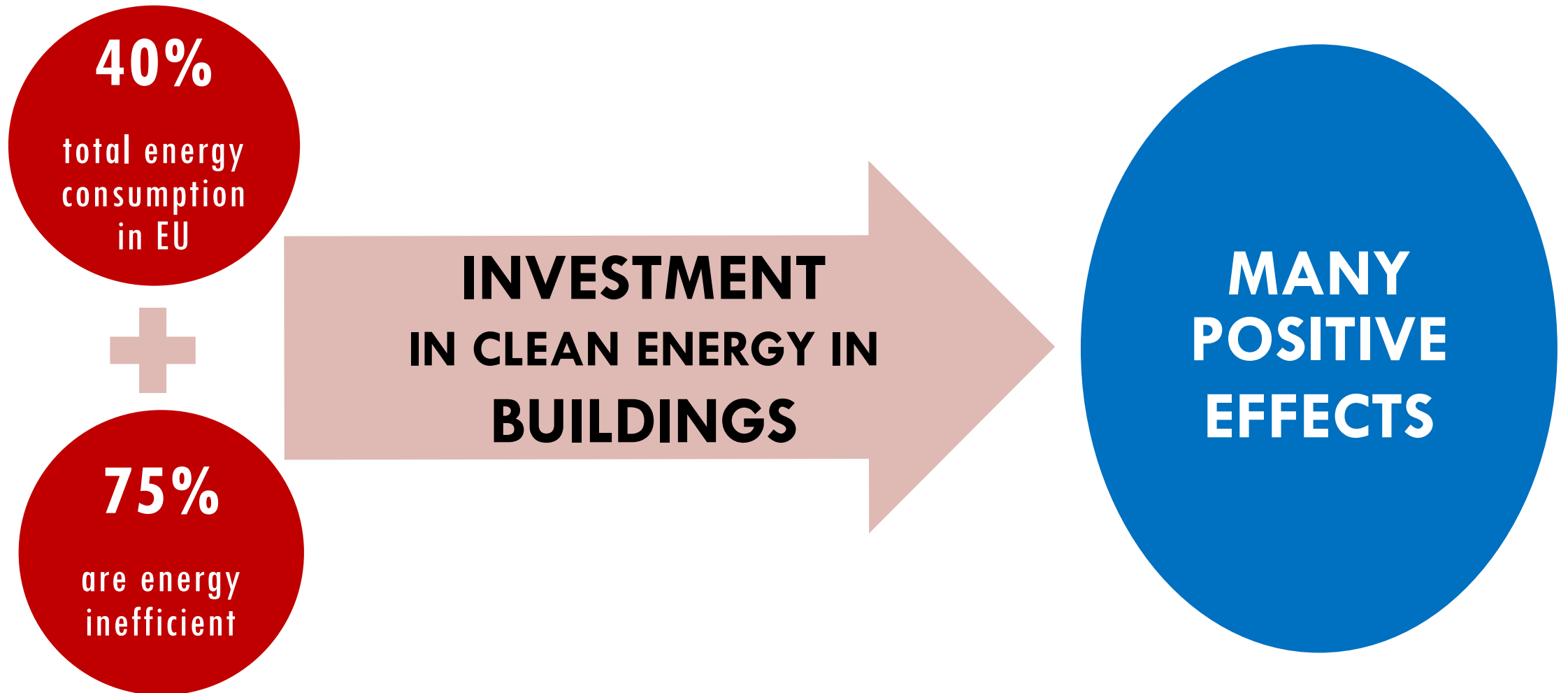
PRESENTATION OUTLINE

1. THE ROLE OF BUILDINGS IN CLEAN ENERGY TRANSITION
2. PROPERTY ASSESSED CLEAN ENERGY (PACE)
 - A. THE PACE CONCEPT
 - B. PACE ORIGINS AND EXPANSION
 - C. ADVANTAGES OF PACE PROGRAMS
3. HOW TO IMPLEMENT PACE PROGRAMS - IN SPAIN
4. CONCLUSIONS

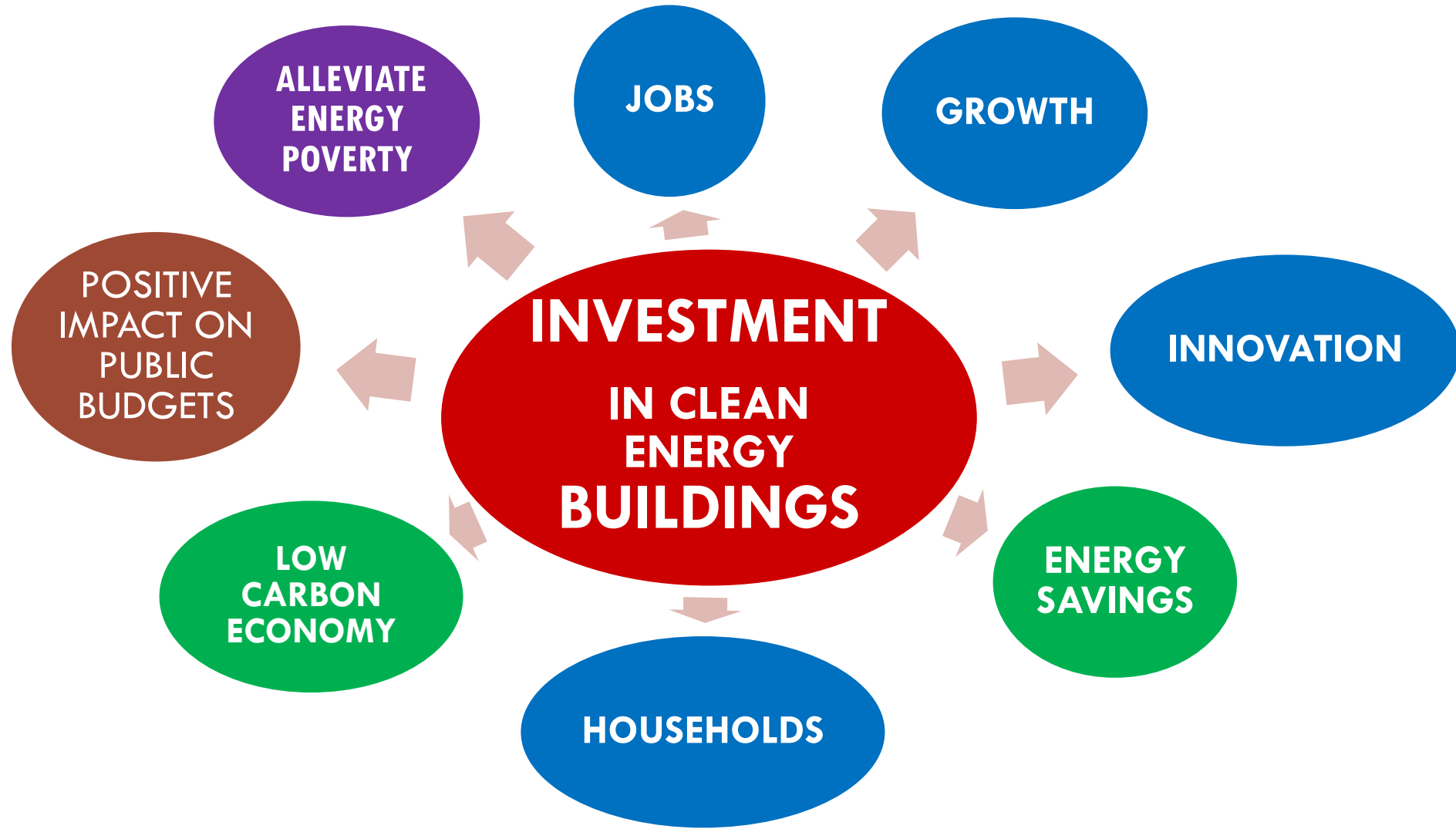
EU APPROACH TO CLEAN ENERGY TRANSITION



BUILDING'S ROLE IN CLEAN ENERGY TRANSITION



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Current rate of building renovation in EU

1% each year

WHY?

BUILDING'S ROLE IN CLEAN ENERGY TRANSITION

REASONS FOR THIS UNDERINVESTMENT

- **competition for scant capital**
- **doubts about the possible benefits**
- **shortage of skilled workers and competent contractors**
- **lack of trustworthy information**

BARRIER: UP-FRONT COSTS

BUILDING'S ROLE IN CLEAN ENERGY TRANSITION





PACE
Property Assessed Clean Energy |



PACE CONCEPT

A creative financing mechanism

The cost of energy efficiency and renewable energy improvements is added to property owners' yearly property tax

PACE CONCEPT



PACE CONCEPT

UNDER PACE PROPERTY TAX ASSESSMENTS CONSTITUTE A LIEN ON THE PROPERTY

- In the event of non-payment of the assessment, the local government has the ability to foreclose on the delinquent property
- These assessments take priority over private liens

PACE PROPERTY ASSESSMENT PROVIDES A SECURE PAYBACK MECHANISM

PACE CONCEPT

**PACE ASSESSMENTS PROVIDE SECURE
PAYBACK MECHANISM**

**LOWER BORROWING COSTS
+
LONGER REPAYMENT PERIODS**

**OVERCOMES THE BARRIER
UPFRONT COSTS**

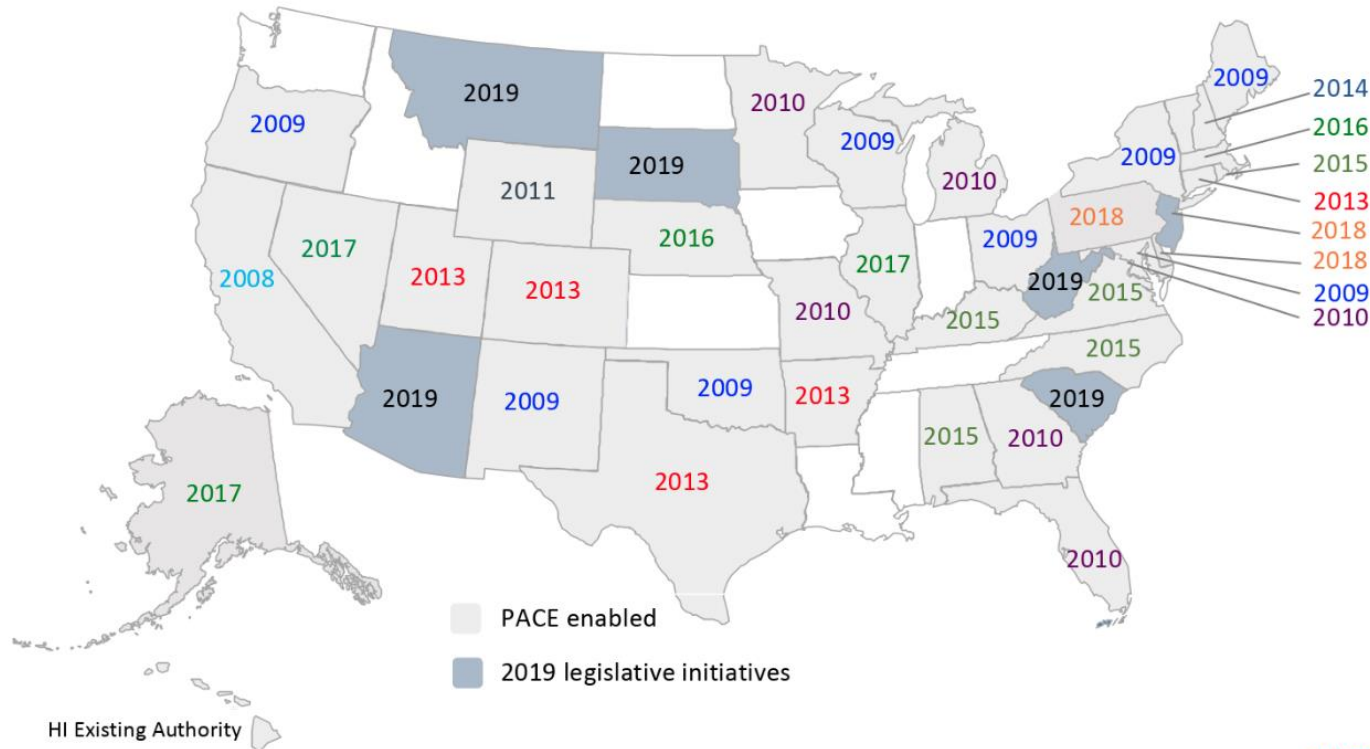
PACE ORIGINS...

CALIFORNIA July 2008

Enabling legislation - Assembly Bill 811 “Contractual assessments: energy efficiency improvements”

- Palm Desert City Council: Energy Independence Program (EIP)
- City of Berkeley: Financing Initiative for Renewable and Solar Technology (FIRST) program

... AND EXPANSION



34 STATES
Enabling legislation

20 STATES
Active PACE programs



PACE ADVANTAGES

FOR PROPERTY OWNERS

- Overcome the barrier of upfront costs
- Easier credit access
- The assessment runs with the property

FOR LOCAL GOVERNMENTS

- Promote sustainability
- Consumer confidence in the economic value of energy efficiency
- Low fiscal cost
- Create jobs



IMPLEMENTING THE PACE CONCEPT

SPAIN

PUBLIC INTERESTS AT STAKE

- Reduce polluting emissions and speed transition towards clean energy in buildings
- Improving energy efficiency in homes: savings on the energy bill
- Efficient in combating energy poverty: 11% of Spanish households
- Removing structural barriers and improving access to buildings: right to decent and adequate housing (art. 47 CE)
- Boost economic growth and create jobs: increase the demand for highly-trained professions specialised in innovation in the building sector

PUBLIC INTERESTS AT STAKE

Justify establishing public contributions - different from taxes-

- These new public charges may only be imposed in accordance with the law (art. 31.3 CE) — an Act by the Parliament
- They should be collected in the same manner and with the same priority as Real Property local Tax (IBI)
- Each PACE program should be approved by Local Government ordinance

CONCLUSIONS

The PACE concept provides lenders with increased security which leads to

- **lower borrowing costs**
- **longer repayment periods**

CONCLUSIONS

The PACE secure payback mechanism is therefore

A SOLUTION TO THE MARKET FAILURE

that is presently preventing investment in clean energy and in energy efficiency retrofits in buildings in Europe

CONCLUSIONS

- **Implementing initiatives similar to the PACE concept in Spain would require to establish public contributions by an Act of Parliament**
- **Enable the local governments to approve PACE programs**
- **These public contributions should be collected in the same manner and with the same priority as Real Property Local Tax (IBI)**