



CLIMATE & STRATEGY  
PARTNERS



Energy Efficiency  
Financial Institutions Group



Confederación Nacional  
de la Construcción

WORKING GROUP FOR  
BUILDINGS RENOVATION (GTR)

Sponsored by:



# EEFIG MS-level Process Results for Spain

Prepared by Mauricio Yrivarren,

Senior Research Associate at Climate Strategy

# How to Increase the Flow of Energy Efficiency Investments in EU



The Energy Efficiency Financial Institution Group (“EEFIG”) was established to determine how to overcome the well documented challenges to obtaining long-term financing for **energy efficiency**

**EEFIG’s work has benefited from:**

Active input of some 120 expert participants (8,000 hours)

40% of the EEFIG participants either work for, or represent the views of, financial institutions. Participation from financial institutions, policy makers, finance users (buildings, industry or SME) and energy efficiency experts

## EEFIG’s Mandate

- 1 What are the most imminent challenges that must be overcome?
- 2 Who would be the right party to address them?
- 3 What should the European Commission/ EU do?

# EEFIG's 120 Participants Represent over 100 Organizations



Energy Efficiency  
Financial Institutions Group

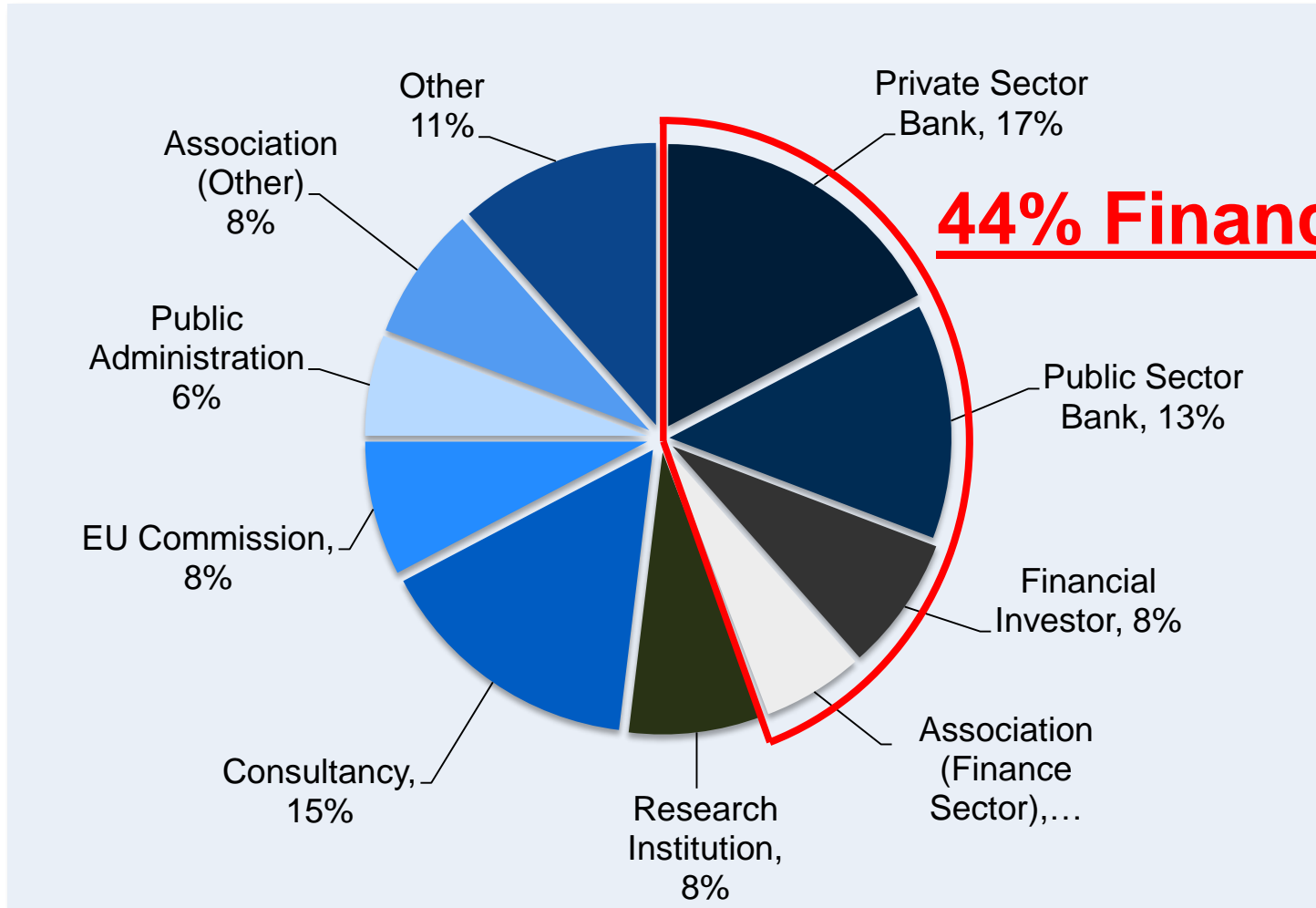
ABB  
Agentschap NL  
Allianz Global Investors  
Europe GmbH  
Allianz Climate Solutions  
Allianz Real Estate  
ASN Bank  
Aurubis Belgium N.V./S.A.  
Aviva Investors  
Bank Nederlandse Gemeenten (BNG)  
Bank of Valetta p.l.c.  
Banque Public d' Investissement  
Belesco asbl  
Belfius  
Bloomberg New Energy Finance  
BNG Bank  
BNP Paribas Asset Management  
BNP Paribas Investment Partners  
Buildings Performance Institute Europe (BPIE)  
Caisse des Dépôts et Consignations  
Cassa Depositi e Prestiti  
CDC Climat  
CECIMO  
Cembureau  
Citi Handlowy  
Bank Handlowy w Warszawie S.A.  
Climate Strategy & Partners  
Cogen Europe  
Credit Suisse Securities (Europe) Limited  
Deneff  
Deutsche Bank  
DNV GL  
E3G  
EASME

European Commission (EC)  
Econoler  
EDF FENICE  
EEP – Institute for Energy Efficiency in Production,  
University of Stuttgart  
Energy Efficiency in Industrial Processes (EEIP)  
EFIEES  
Efinovia Europe  
EIIIF  
Emerson Electric Co.  
European Association of Energy Service Companies (eu.esco)  
European Builders Confederation (EBC)  
EuroACE  
Eurobank Ergasias SA  
Eurochambres  
European Association of Public Banks (EAPB)  
European Bank for Reconstruction  
and Development (EBRD)  
European Climate Foundation  
European Investment Bank (EIB)  
European Property Federation  
FIEC (European  
Construction Industry Federation)  
Green Investment Bank  
HBOR – Croatian Bank for  
Reconstruction and Development  
Hermes Investment Management  
Honeywell  
Huber Dixon  
Hungarian Development Bank  
(MFB)  
IFIEC (International Federation of Industrial Energy  
Consumers)  
ING Commercial Banking  
International Energy Agency

Institutional Investors Group on Climate Change (IIGCC)  
Investor Confidence Project  
IPEEC  
KfW Bankengruppe  
Munich Re  
Network of European Financial Institutions for SMEs (NEFI)  
NRW Bank  
Orgalime  
Parhelion  
Polish Bank Association  
Polish National Fund for Environmental Protection and Water  
Management  
RICS  
Schneider Electric  
Siemens  
Siemens Financial Services GmbH  
Societe Generale  
SPIRE  
Spire2030  
Susi Partners  
Sustainable Development Capital Limited  
Tera srl  
The CO-Firm GmbH  
The Energy Managers  
Turboden  
UNEP Finance Initiative (UNEP FI)  
Unicredit  
UNIDO - United Nations Industrial Development Organization  
Union Européenne de l'Artisanat et des Petites et Moyennes  
Entreprises – UEAPME  
Linköping University  
World Business Council for Sustainable Development



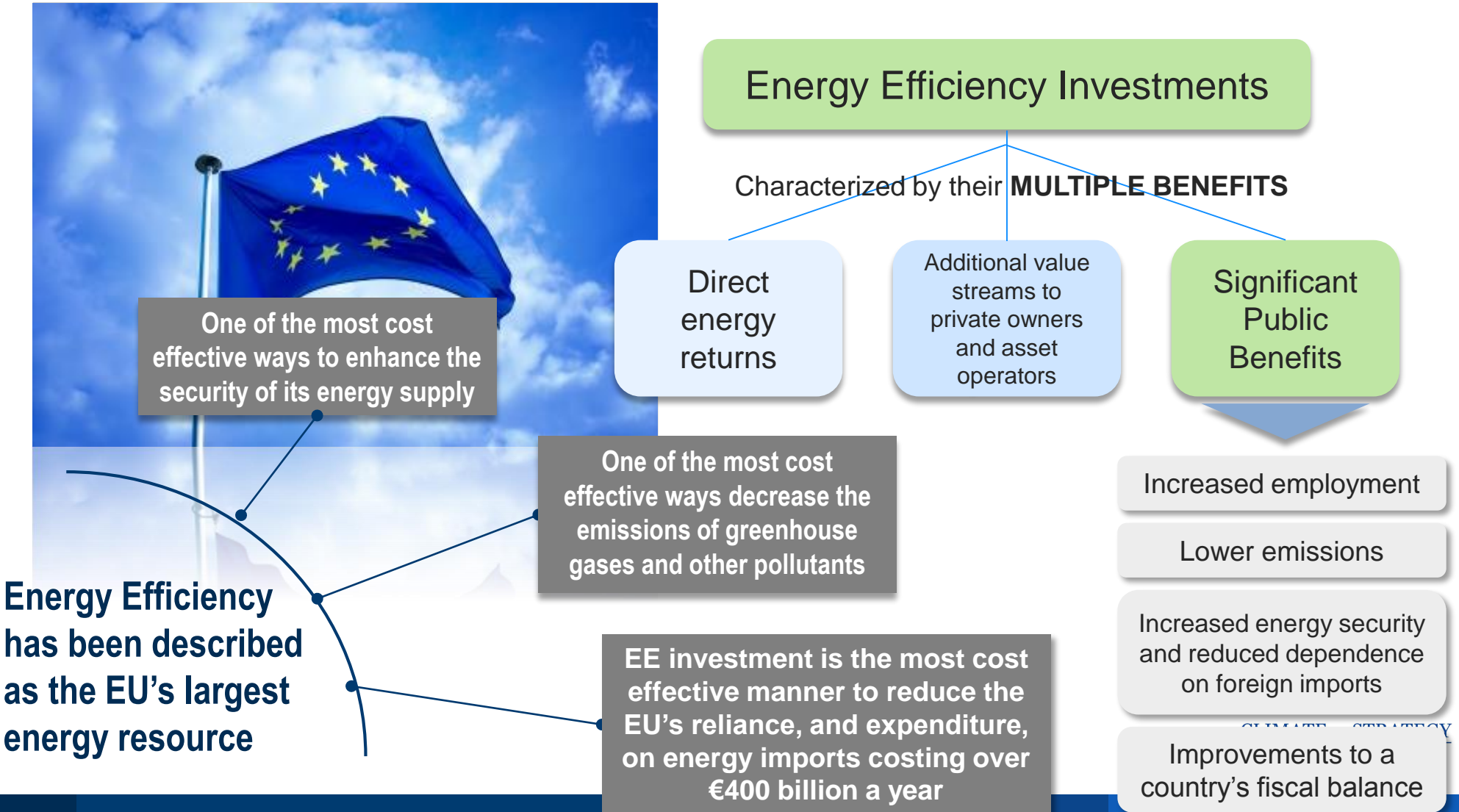
# EEFIG Participant Expertise Distribution



**44% Finance**



# Energy Efficiency is Europe's First Fuel



# Since 2011, GTR has been active in analyzing opportunities to assist the energy transition of Spanish Buildings...

## GTR = Working Group for Buildings Renovation 2011-2015

### GTR 2011 Report

Has gained momentum among Spanish policy makers and private sector



### GTR 2012 Report

It is an update which has furthered the model and its conclusions



### GTR 2014 Report

A National Strategy for Rehabilitation



### 2015-2016

✓ **Assessment of the Autonomous Communities**

✓ **Study on financing tools. GTR Finance**



✓ **Review of the 2017 National Strategy:**



# GTR = 12 Independent Experts, EU Context and 3x 2015 TGs: Autonomous Communities, Financing and Build-UPON

## GTR Members

**Valentín Alfaya**  
**Luis Álvarez-Ude**  
**Xavier Casanovas**

*Director de Calidad y Medio Ambiente del Grupo Ferrovial.*

*Arquitecto*

*Director de Rehabilitación y Medio Ambiente del Colegio de Aparejadores y Arquitectos Técnicos de Barcelona.*

**Albert Cuchí**  
**Enrique Jiménez Larrea**  
**Francisco J. González**  
**Fernando Prats**

*Universitat Politècnica de Catalunya. Barcelona Tech.*

*Abogado, ex-Director del IDAE.*

*Profesor de la Escuela de Arquitectura de la Universidad Europea de Madrid. Asesor del Centro Complutense de Estudios e Información Medioambiental para el programa Cambio Global España 2020/50.*

**Juan Rubio del Val**  
**Peter Sweatman**  
**Alicia Torrego**  
**Ignacio de La Puerta**  
**Dolores Huerta**

*Director de la Sociedad Municipal de Rehabilitación de Zaragoza.*

*Director general de Climate Strategy & Partners.*

*Gerente de la Fundación Conama.*

*Arquitecto*

*Secretaria Técnica de GBCe*

**Coordinated by:**



**Sponsored by:**



CLIMATE & STRATEGY  
PARTNERS

# “GTR Finance” has 50 members, is supported by the CNC, and 46 participated in EEFIG MS-level process...

GTR Finance = Seeks to solve financing needs for the energy rehabilitation of buildings

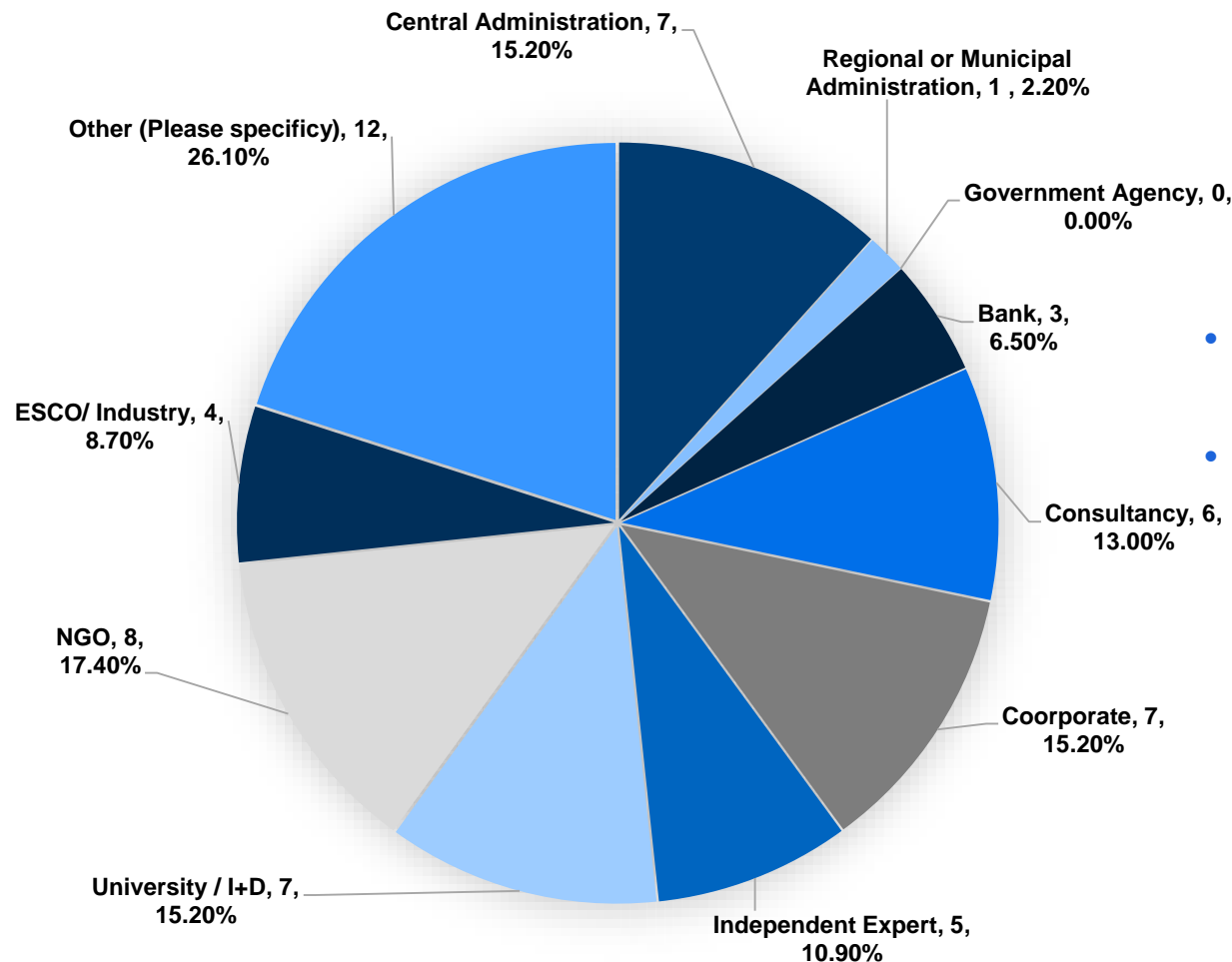
- **GTR Finance Mandate:**

- Define those essential and much needed instruments for the financing of the sector;
- Identify changes needed to increase the economic activity regarding energy works

- **46 from 50 participants answered EEFIG survey in Spanish**

- **Participants belonged to multiple sectors:**

- Banks, Private Sector, Public Sector, Experts, Industry, ESCOs, SMEs, Trade Associations, Distributors of plumbing and electricity supplies, Spanish Banking Association, Construction Companies, and NGOs

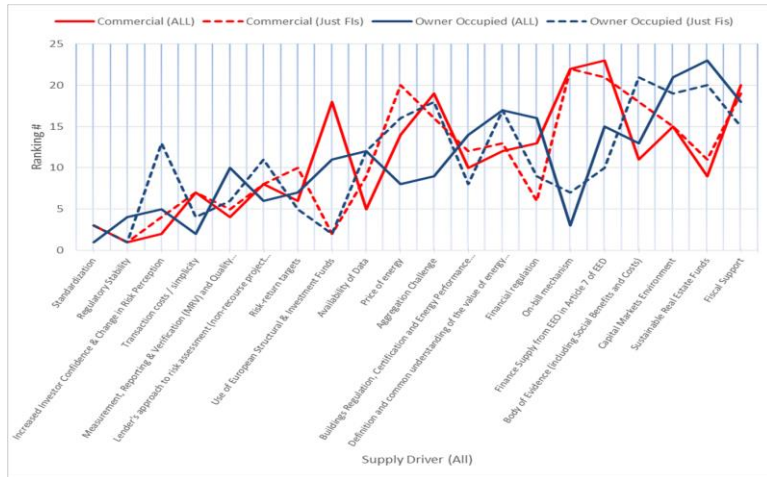




# Used EEFIG Methodology and MS-level Process...

**Table 3:** EEFIG ranking of key drivers affecting supply of energy efficiency investment by market segment.

Buildings Sector	Commercial	Public	Public Rental	Owner Occupied	Private Rental	Average Rank
Standardization	3	1	1	1	2	1.6
Regulatory Stability	1	4	2	4	3	2.8
Increased Investor Confidence & Change in Risk Perception	2	5	7	5	4	4.6
Transaction costs / simplicity	7	10	6	2	1	5.2
Measurement, Reporting & Verification (MRV) and Quality Assurance	4	2	4	10	8	5.6
Lender's approach to risk assessment (non-recourse project financing vs. Borrower-based credit recourse)	8	6	5	6	5	6
Risk-return targets	6	11	9	7	7	8
Use of European Structural & Investment Funds	18	3	3	11	9	8.8
Availability of Data	5	9	13	12	10	9.8
Price of energy	14	7	10	8	15	10.8
Aggregation Challenge	19	16	8	9	11	12.6
Buildings Regulation, Certification and Energy Performance Certificates	10	12	14	14	13	12.6
Definition and common understanding of the value of energy efficiency	12	8	15	17	18	14



## Energy Efficiency Financial Institutions Group

Energy Efficiency – the first fuel  
for the EU Economy

How to drive new finance for energy  
efficiency investments

### FINAL REPORT

covering Buildings, Industry and SMEs

February 2015



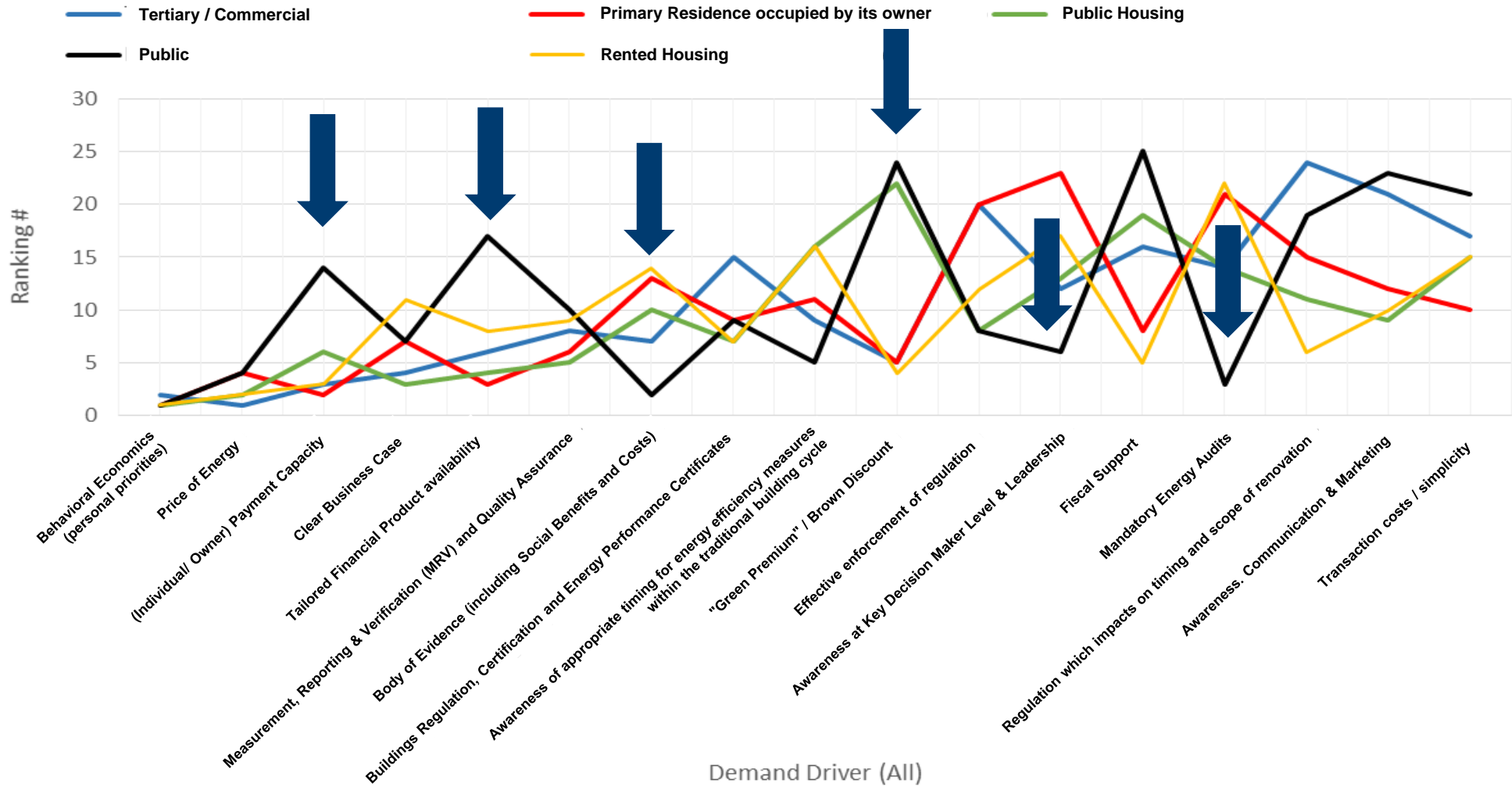
**Energy Efficiency**  
Financial Institutions Group

CLIMATE & STRATEGY  
PARTNERS

# Analysis: “Top 10” Demand and Supply Drivers

DEMAND	SUPPLY
Behavioral Economics (personal priorities)	Price of energy
Price of energy	Definition and common understanding of the value of energy cost savings
(Individual/ Owner) Payment Capacity	Sustainable Real Estate Funds
Clear Business Case	Use of National Energy Efficiency Fund
Tailored Financial Product availability	Use of European Structural & Investment Funds
Measurement, Reporting & Verification (MRV) and Quality Assurance	Communication between market actors
Body of Evidence (including Social Benefits and Costs)	Regulatory Stability
Buildings Regulation, Certification and Energy Performance Certificates	Fiscal Support
Awareness of appropriate timing for energy efficiency measures within the traditional building cycle	Buildings Regulation, Certification and Energy Performance Certificates
"Green Premium" / Brown Discount	Risk-return targets

# Analysis: Demand Drivers per Segment

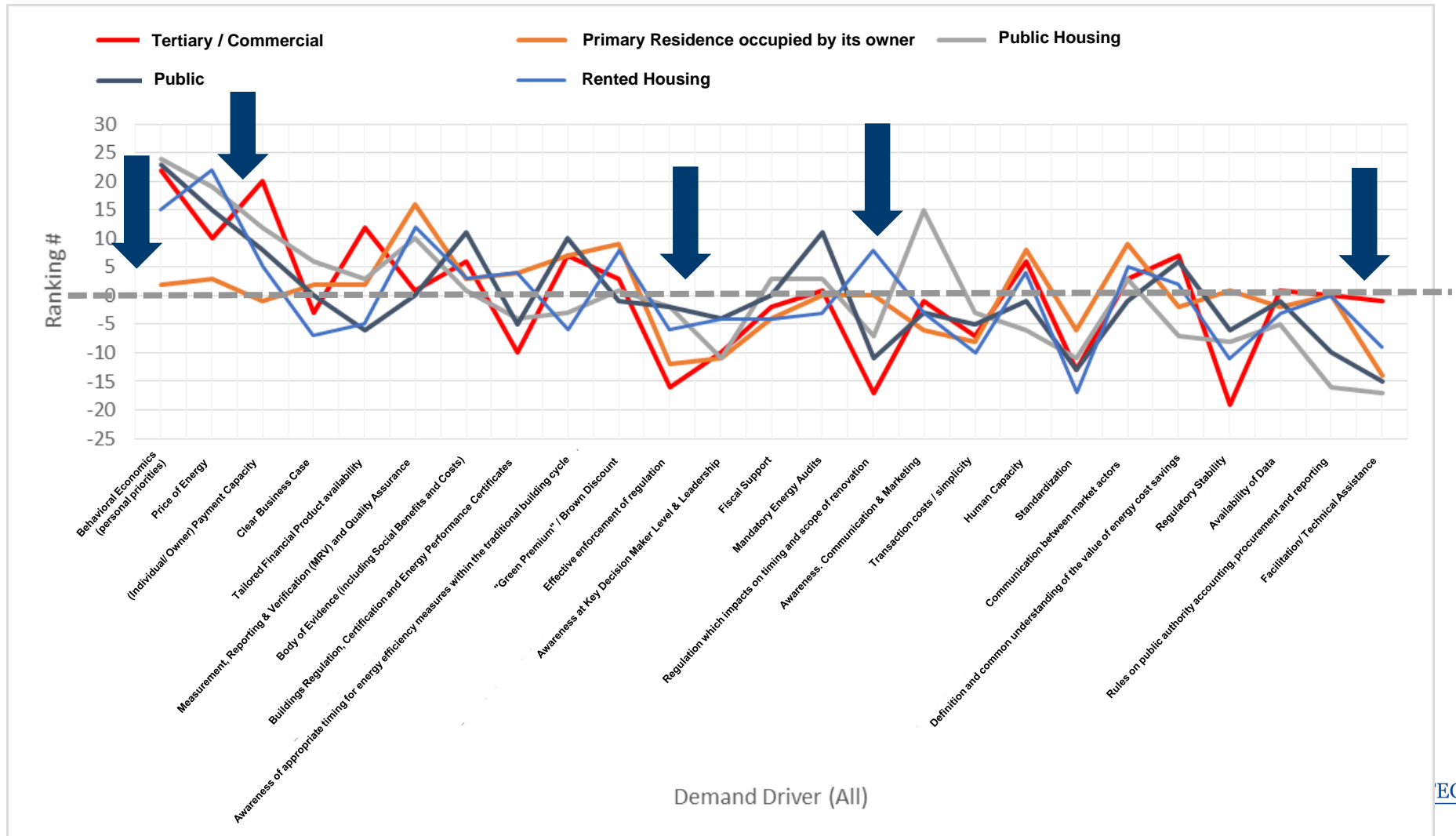


# Analysis: Results for Demand Drivers

*GTR Finance EFIG MS-level WG notes the following results based on the Expert Survey:*

- **Demand drivers are aligned across several sectors except in Public Buildings**
- **Energy Efficiency is not a priority in any segment when compared to Other Priorities**
- **There is a lack of awareness (except for the Public Sector) of the multiple economic benefits inherent to energy efficiency upgrades**
- **The Value Increase (“Green Premium”) due to retrofits is indeed a big driver within housing and commercial buildings**
- **A Tax benefit could significantly catalyze the retrofit of properties**

# Analysis: Spain vs EU, Demand By Segment

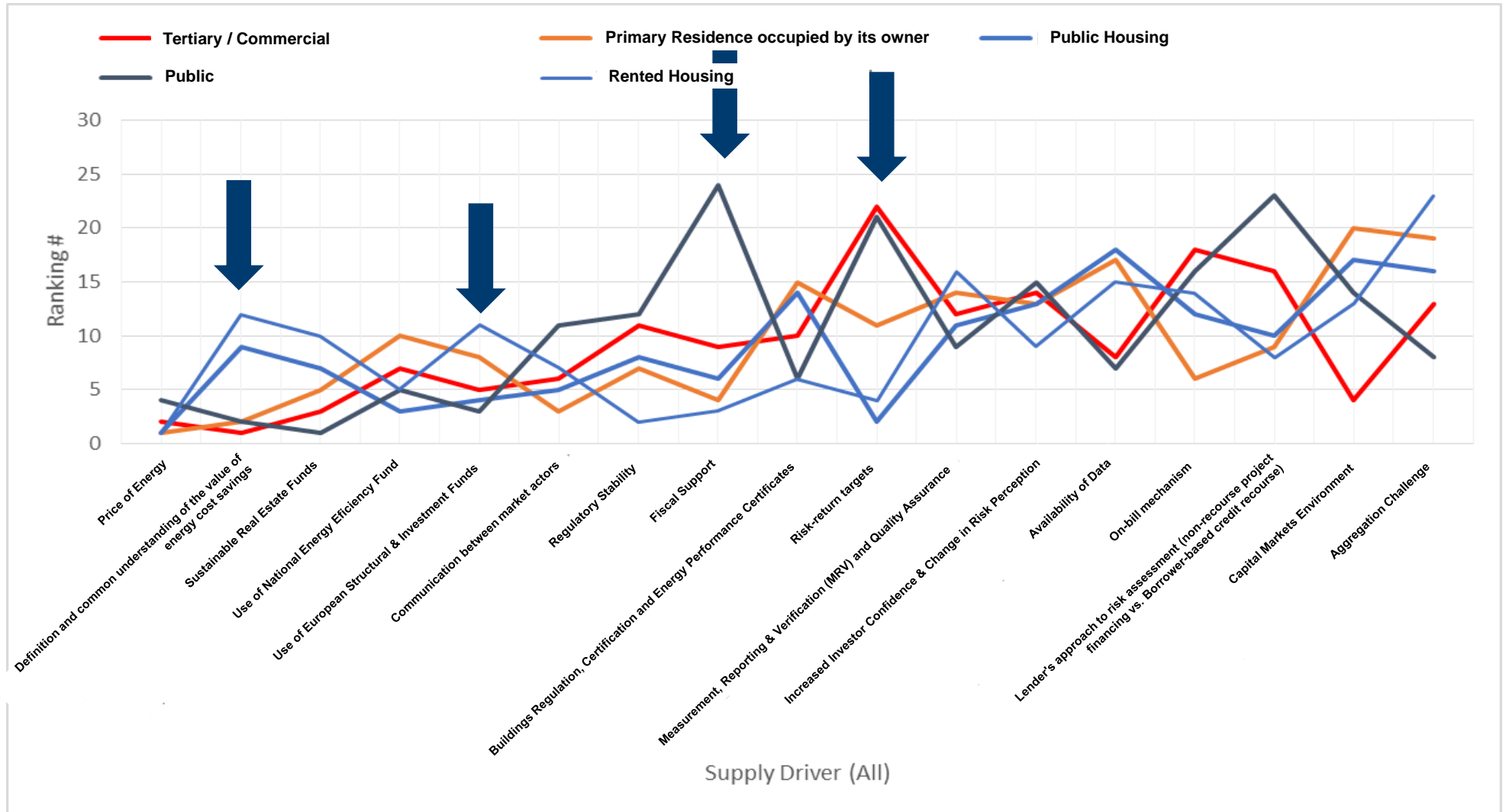


# Analysis: Spain vs EU, Demand By Segment

*GTR Finance EEFIG MS-level WG notes the following results based on the Expert Survey:*

- **In Spain the price of energy and the availability of capital is more relevant than the EU average, except in dwelling occupied by owners**
- **The demand drivers for energy renovation in the Spanish public and commercial sectors differs considerably other EU countries**
- **Regulatory instability and human capacity are less important in Spain when compared with other EU countries**
- **In Spain, Technical assistance, Data and Rules on Accounting are not perceived as such strong barriers as in other EU countries**

# Analysis: Supply Drivers by Segment



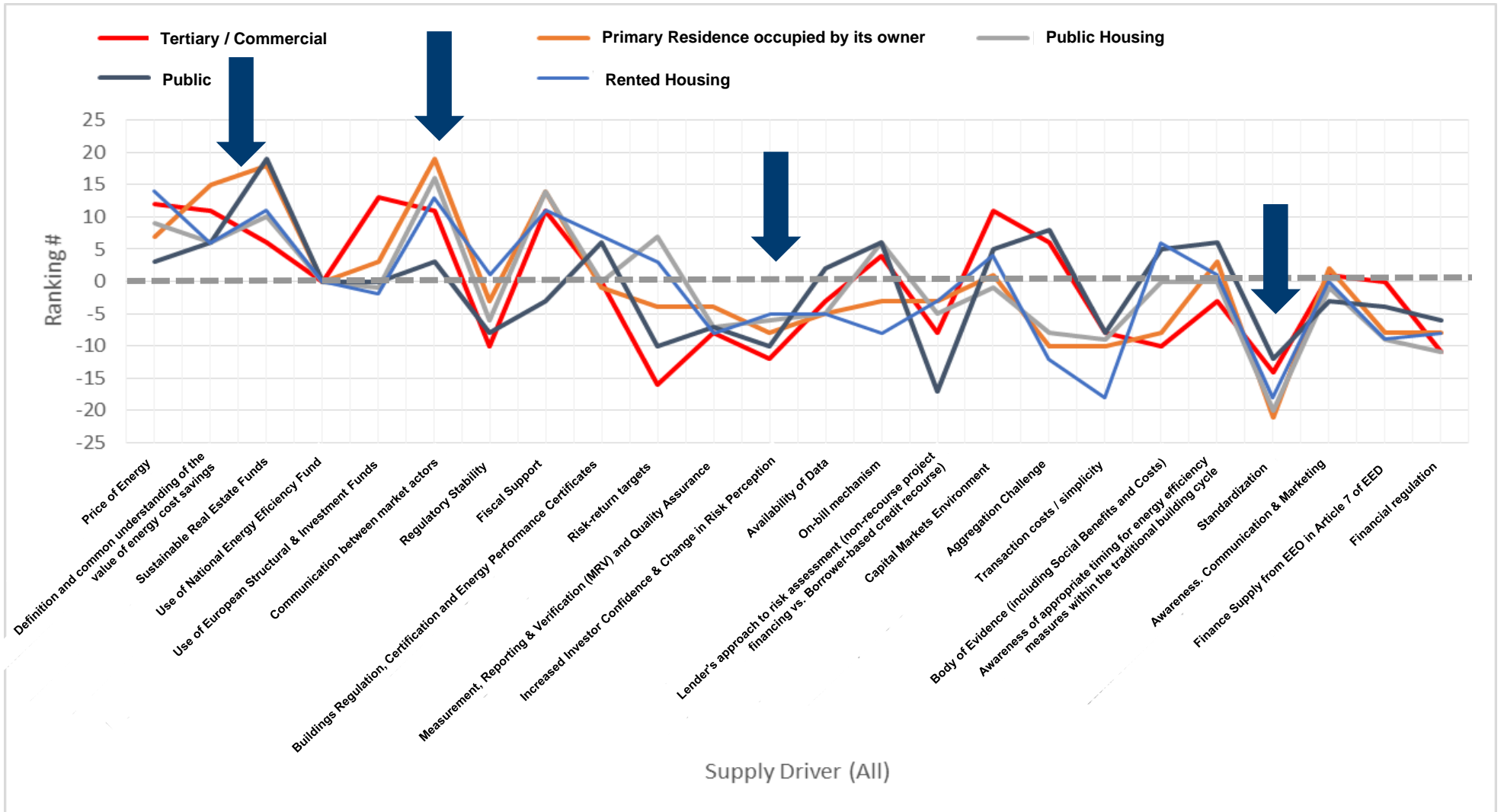
# Analysis: Results for Supply Drivers

*GTR Finance EEFIG MS-level WG notes the following results based on the Expert Survey:*

- **Price of energy is the most relevant factor for Financial Institutions finance supply in all sectors**
- **The understanding of the economic value of energy savings are certainly relevant drivers except in properties for rent and public housing**
- **For housing, risk-return targets for banks is a significant barrier – yet not for the public and commercial sectors**
- **Tax benefits could also catalyze the supply of financing for the rehabilitation of housing**



# Analysis: Spain vs EU, Supply By Segment



# Analysis: Spain vs EU, Supply By Segment

*GTR Finance EEFIG MS-level WG notes the following results based on the Expert Survey:*

- **In the case of Housing in Spain, the price of energy and the availability of capital are more relevant supply drivers than the EU average**
- **The lack of funds and tailored financial products for rehabilitation in all sectors is indeed very relevant in Spain**
- **The supply of the so called “integral rehabilitation” of multiple measures (energy and access) is also relevant**
- **Standardization and Technical Issues are not perceived as barriers in terms of supply drivers, contrary to the EU level survey**

# Assessment: Barriers for Private Financing

*GTR Finance: “Identify challenges and barriers that prevent the financing of the sector”*

*Barriers in terms of subsidies and private financing:*

- Clear identification of the **collateral provider**.
- **Collateral** ought to be **clear** and **measurable**.
- Payback **periods** of over 5 and 8 years.
- Loan **Amounts**.

# Assessment: Barriers for Private Financing

*GTR Finance: “Identify challenges and barriers that prevent the financing of the sector”*

*Barriers and solutions in terms of subsidies and private financing.*

- Develop a **single “Model-Type”** for each segment
- **Guarantee Scheme** or Financing Collateral
- **Clear Fiscal Signaling**



# Energy Efficiency

Financial Institutions Group

## **CONCLUSIONS/FINDINGS**

# 0 A Regulatory Framework that Promotes a Culture that Upholds Energy Efficiency

#EnergyEfficiency First

Spain lacks a massive offer of energy rehabilitation supported by its energy companies, retail networks, complemented by a fund that acts as a “Green Bank” focused on the development of energy efficiency projects.

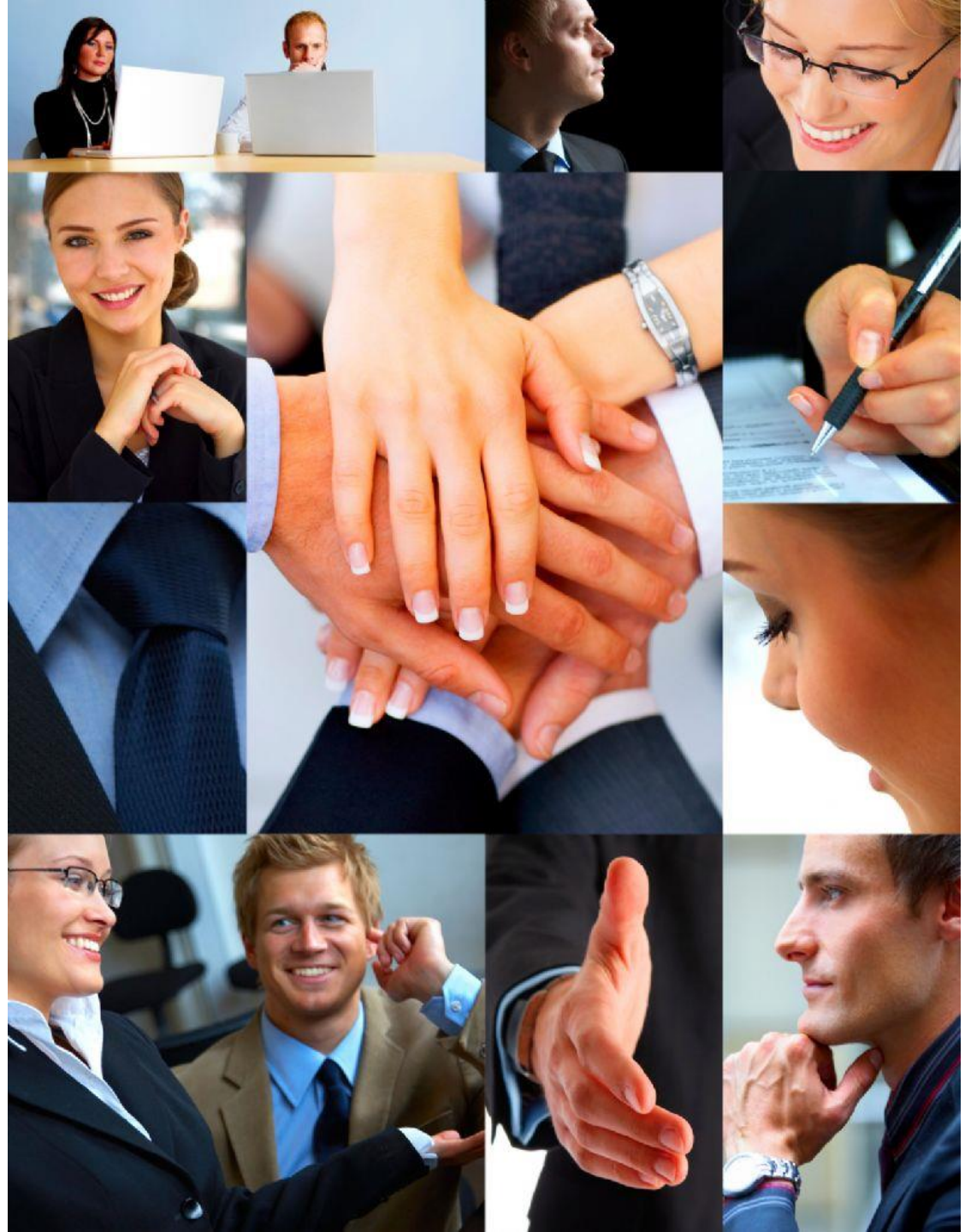
Energy Prices are not good signals as they are now more “fixed” than floating and prices are influenced by Govt which poses uncertainty in the future.



# 1 Educate and train “Accredited Agents” / “Technical Tutors” / “Project Managers”

Mainly for neighbour associations as they need professionals that understand and promote the energy rehabilitation model and are trained and accredited to manage such projects on behalf of the owners.

These professionals ought to be knowledgeable and able to offer the financing of the projects as well.



# 2 Industrialization & Replication of “Model Types”

Each climate zone and building type ought to have a “model type”.

The supply chain for “model types” should be transparent and its financing should be simple and accessible in all Banks’ branches.



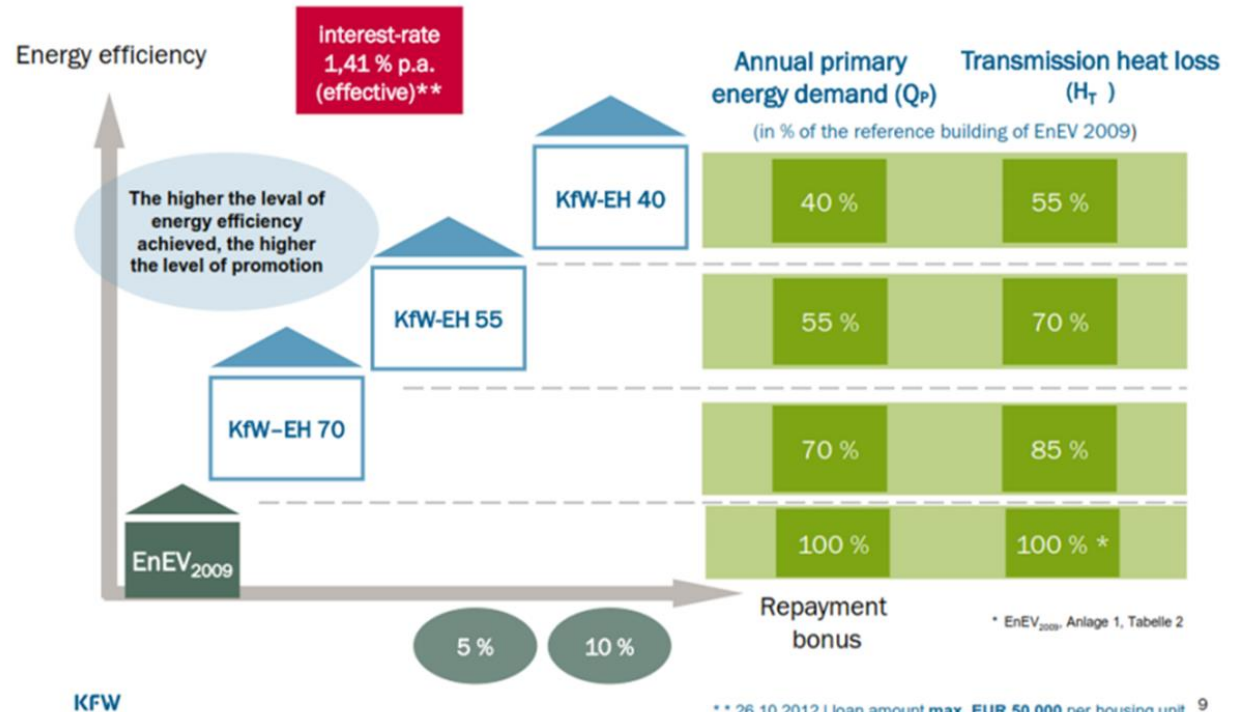




# 3 A financing packet that is simple and tailored specifically for energy retrofits

The financing packet for energy retrofits ought to provide key elements such as the loan, public subsidies and precise instructions that would enable attaining tax deductions. Also, this packet should be available via a network of accredited agents.

...and easy to explain



## Engage and join the conversation!

Users can access:

1

### Latest EEFIG Report & supporting materials

Energy Efficiency – the first fuel for the EU Economy

How to drive new finance for energy efficiency investments

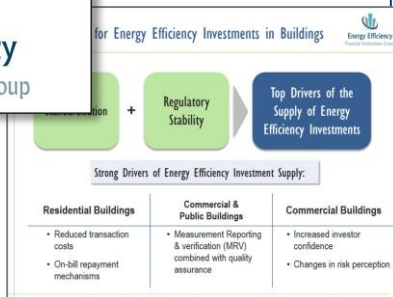
#### FINAL REPORT

covering Buildings, Industry and SMEs

February 2015



Energy Efficiency  
Financial Institutions Group



2

### Engage with the “Energy Efficiency De-risking Project”

Become a user and/or become a data provider and engage in an expert dialogue which contributes to enhancement of the fundamentals of energy efficiency investments in the buildings and corporate sectors



3

### Use the “EEFIG National” Tool & Database

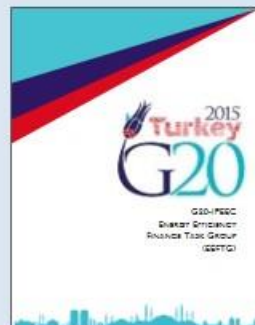
It relies on used a standardized method and process to engage with key expert stakeholders in Spain, France, Germany, Poland and Bulgaria over 12 months. Each country’s results can be found with a series of summaries as well as an interactive review of the EU data



*“Energy efficiency investing has a fundamental and beneficial role to play in the transition towards a more competitive, secure and sustainable energy system with an internal energy market at its core”*

Peter Sweatman CEO of Climate Strategy - EEFIG Launch Feb 26<sup>th</sup> 2015

Climate Strategy leads in Energy Efficiency Finance with 11 white papers written in the past 8 years and supporting international policy initiatives



250+ key note speeches and public conferences on the Transition to a Low Carbon Economy and 120+ press articles, Climate Strategy is working towards the implementation of the Paris Agreement at COP22



Climate Strategy understands the interdependent relationships between:

- Environment
- Society
- Business
- and Government

and their roles in guiding the global transition to a low carbon economy



Follow us  @ClimateSt



# Thank you from GTR – @ClimateSt

## Thanks!

Please download GTR reports at:  
[www.climatestrategy.es](http://www.climatestrategy.es)

This document has been prepared for specific use and should not be published or circulated outside of its intended audience. The facts and figures are derived from public sources and have not been independently verified by Climate Strategy who provides no guarantees for its accuracy nor completeness nor will assume any liabilities for such arising from any third party use of the contents. Any opinions in this document constitute the present opinion of Climate Strategy which is subject to change without notice. There are no financial services marketed here nor intended as promoted herein.

Please refer to website for further information.



WORKING GROUP FOR  
BUILDINGS RENOVATION (GTR)

Sponsored by:



Coordinado por:



CLIMATE & STRATEGY  
PARTNERS