



The Keep on Track! Project Barrier Research and Analysis A European Overview

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- **Agenda**

- **Methodology of the Project**

- **Overall Results**

- **European Union**
- **Bulgaria**

- **Results for the RES-E Sector**

- **European Union**
- **Bulgaria**

- **Conclusions**



Keep on Track!

Methodology of the Project

• European Overview of Barrier Categorisation and Analysis

- **Creation of an interactive online tool (re-frame.eu)**
 - **Optimisation of the research process**
 - **Direct feedback from local stakeholders (broader input base)**
 - **Grouping of barriers into global categories**
 - **Allowing for a better comparison of the barriers**
 - **Definition of cross-categories relevant to all three sectors**
 - **Several categories remain sector-specific**

- **Creation of a Barrier Database**
 - **Containing all barriers reported (EU27)**
 - **Possibility of compiling statistics:**
 - **Per sector (RES-E, RES-H, RES-T)**
 - **Per RES technology**
 - **Per category of barriers (e.g “Administrative processes”)**

● Important Notes:

- **The non-identification of a barrier does not necessarily stand for its non-existence.**
 - **Other national barriers may have been perceived as more important or more urgent**

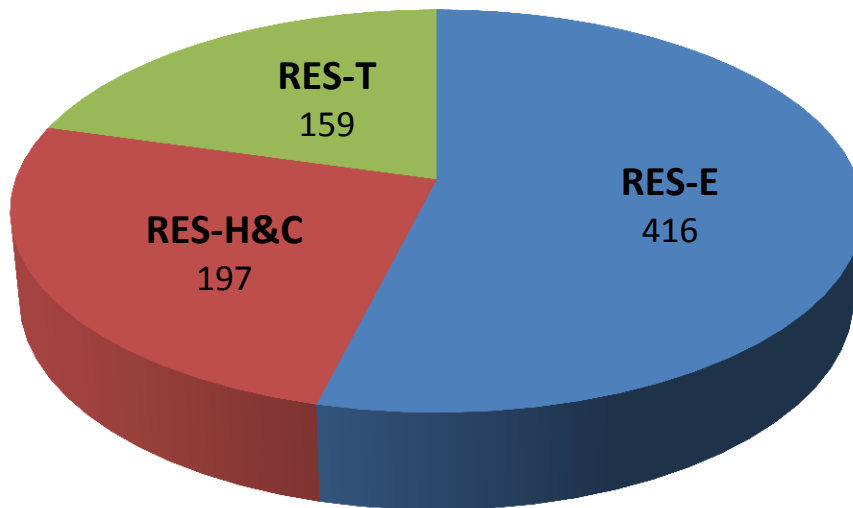
- **A high number of barriers in a specific MS does not necessarily reflect the degree of severity of the national RES situation.**
 - **High barrier awareness in certain countries, favoured by high transparency or high information availability**

- **Our barrier analysis is based on the results received from national associations and stakeholders (re-frame.eu) as well as on back-up research and expert interviews conducted by eclareon.**



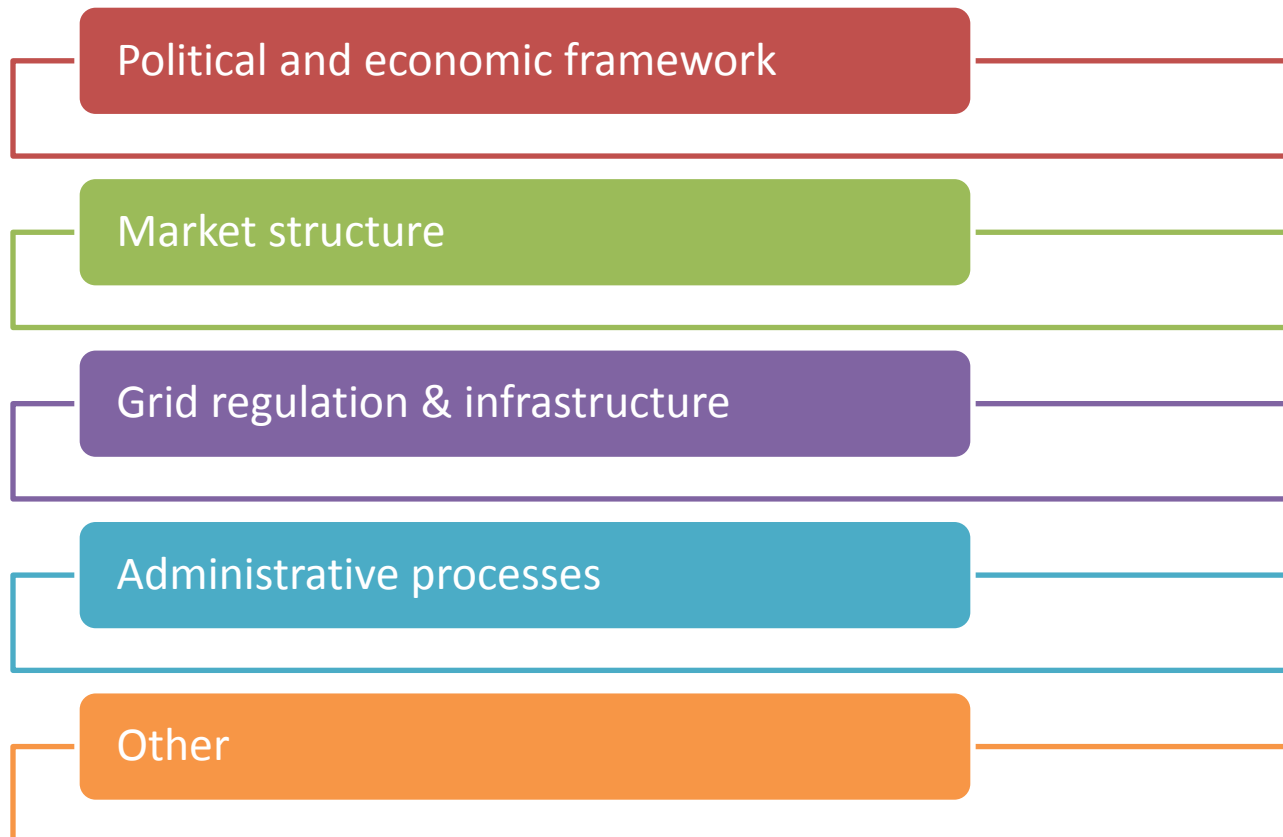
Results

Number of Barriers per Sector

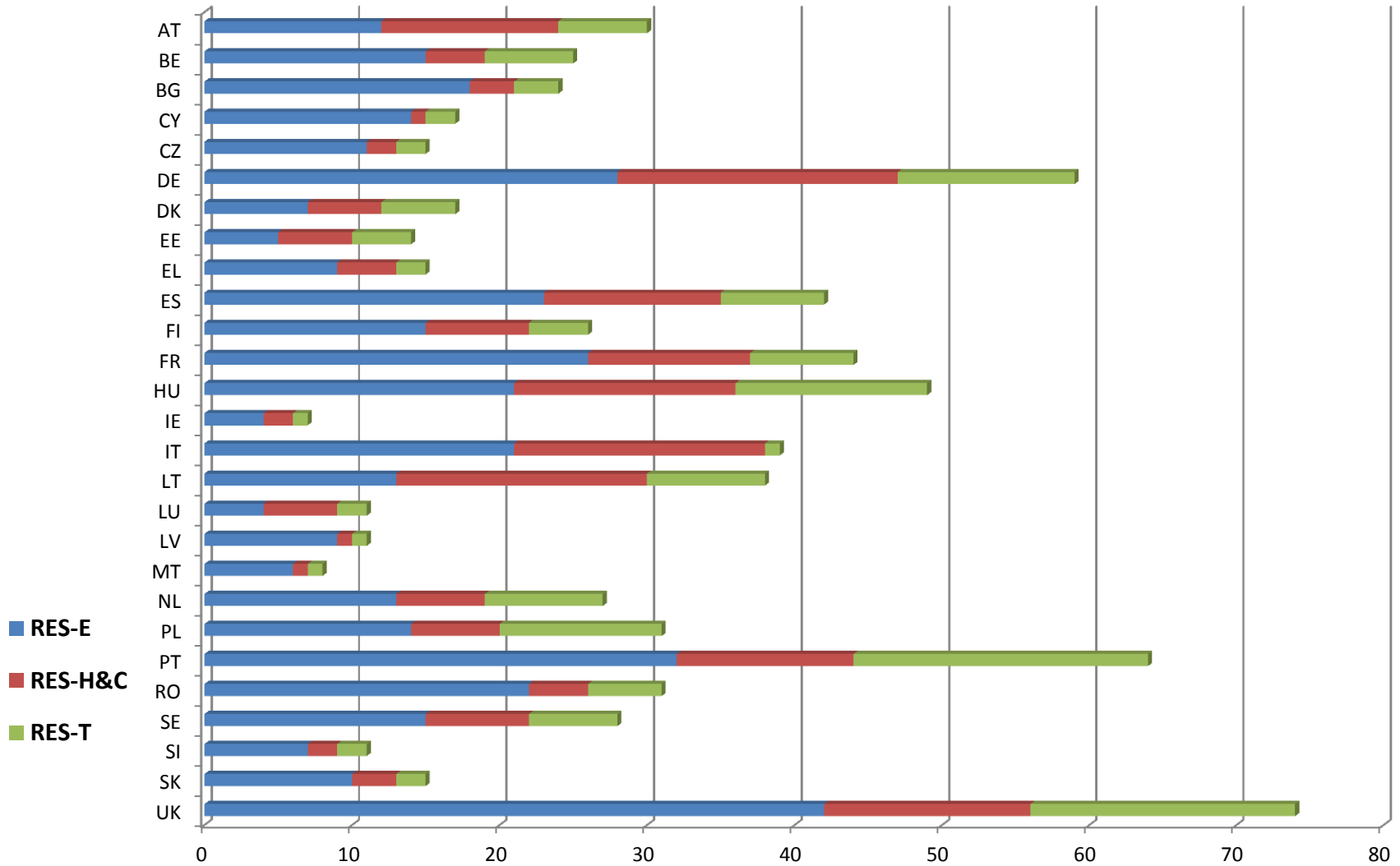


- Total of 772 single national barriers identified
- Classified in 5 global categories, divided into:
 - ✓ RES-E: 24 sub-categories
 - ✓ RES-H: 24 sub-categories
 - ✓ RES-T: 23 sub-categories

- **Main Categories of Barriers for RES-E, RES-H&C and RES-T**

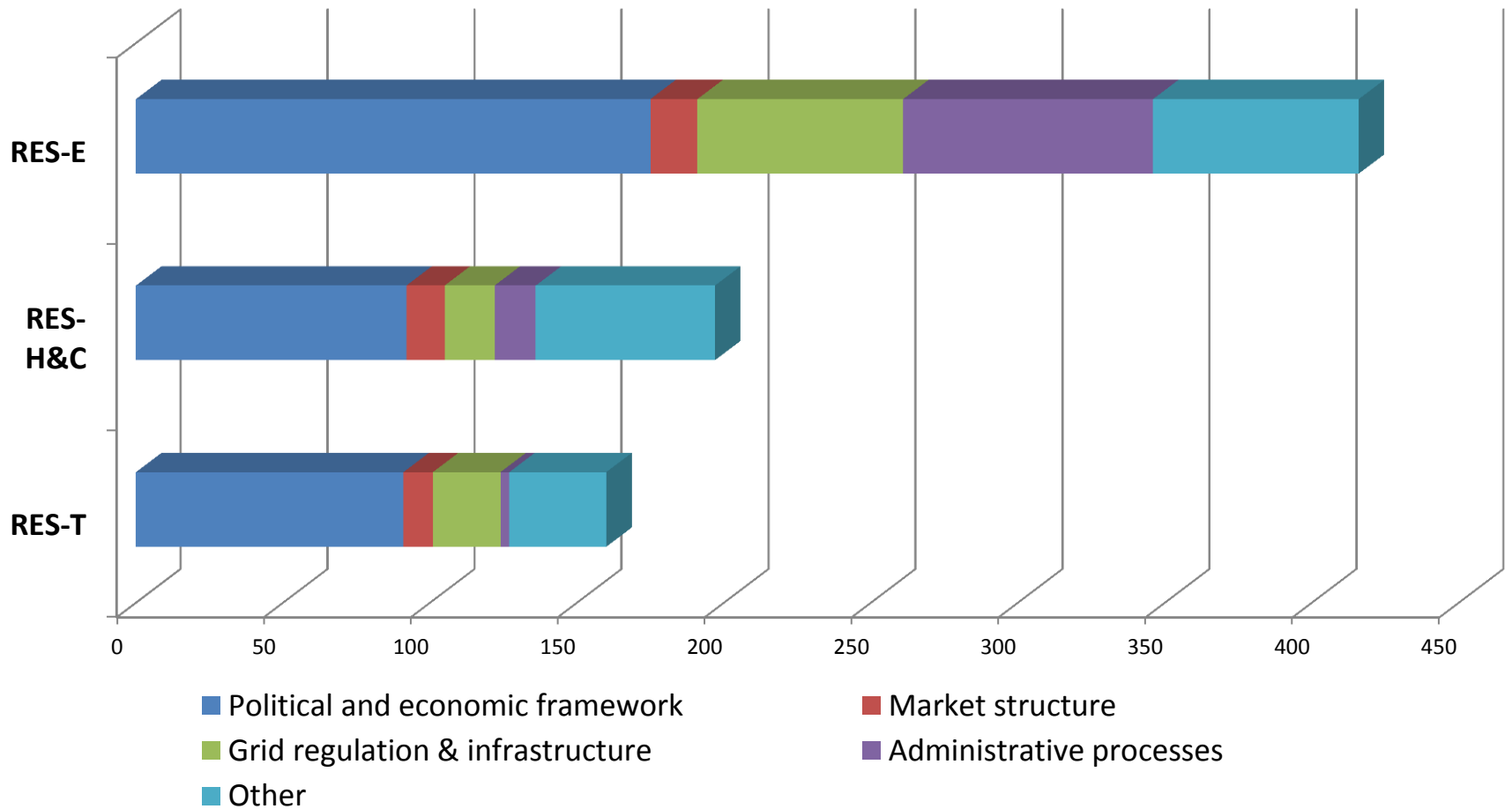


Number of Barriers per Country



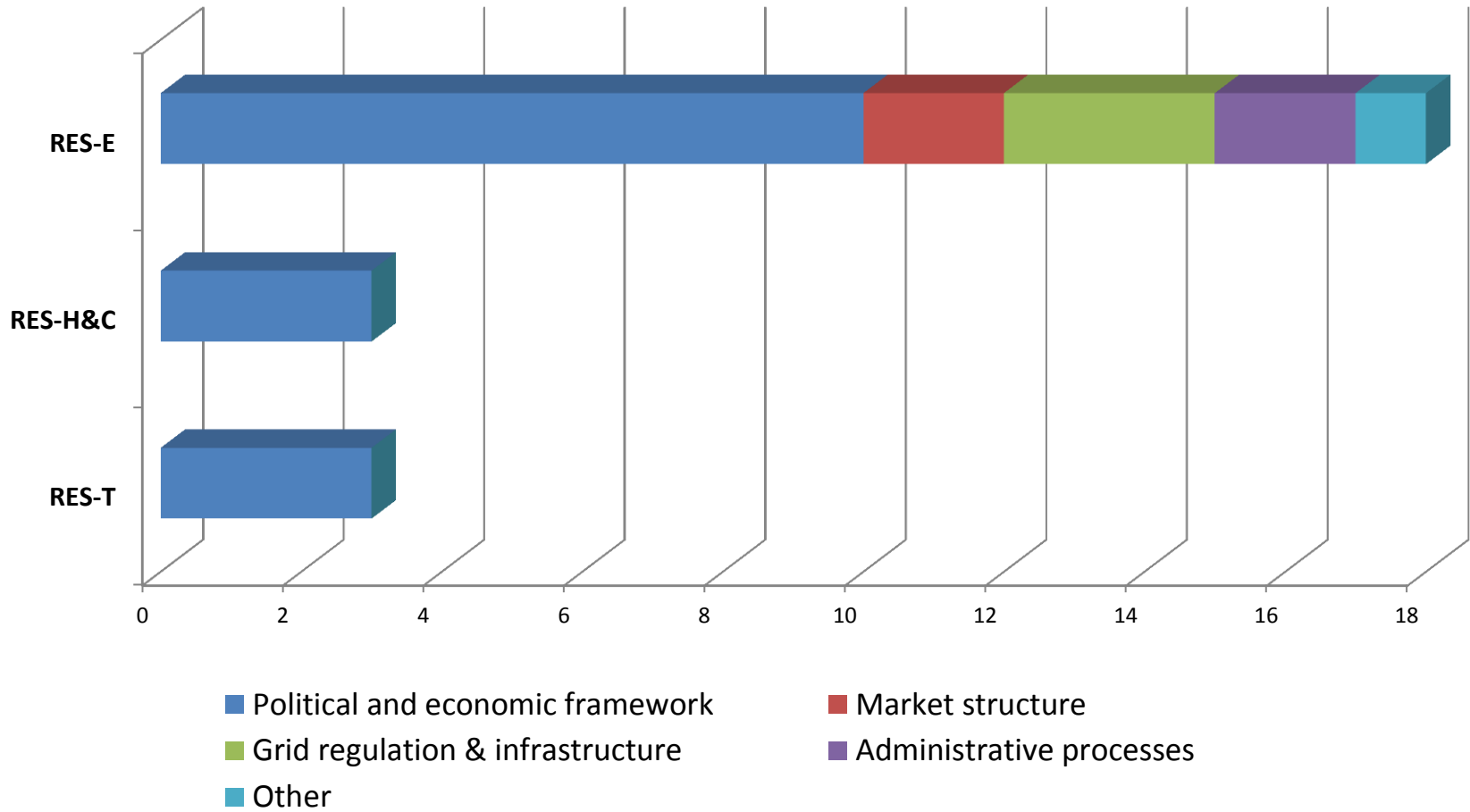


Number of Barriers per Sector and Category





Bulgaria: Barriers per Sector and Category

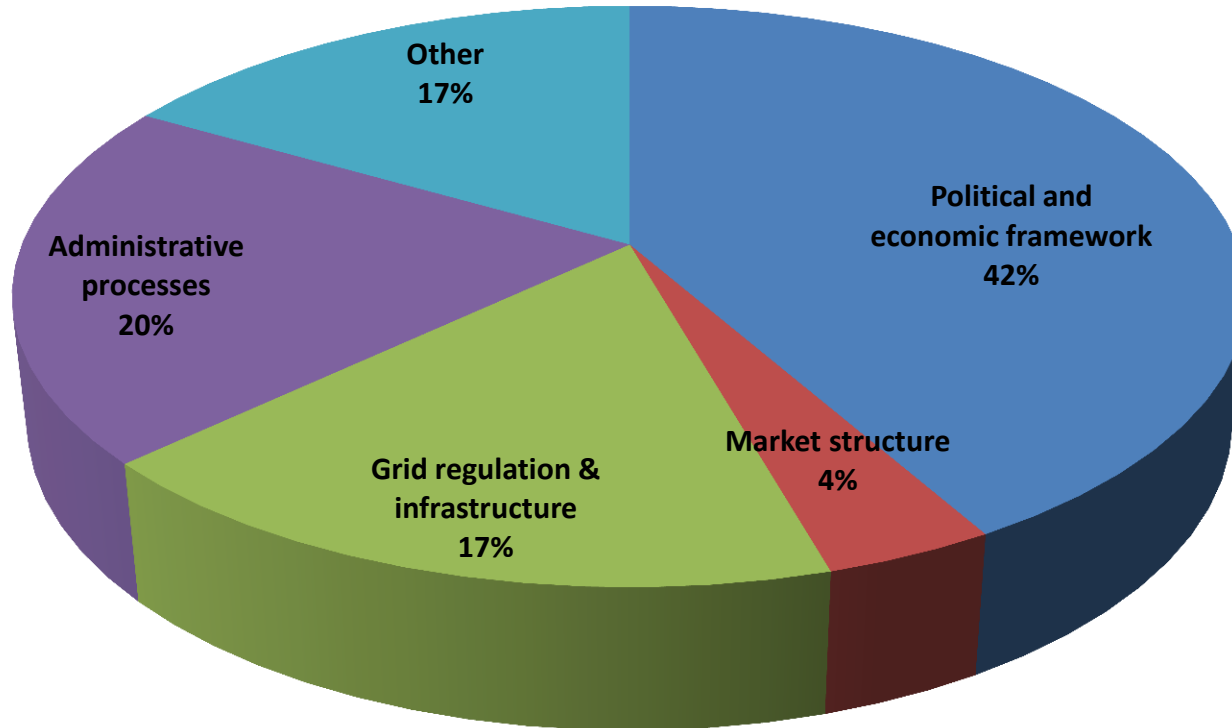




The RES-E Sector

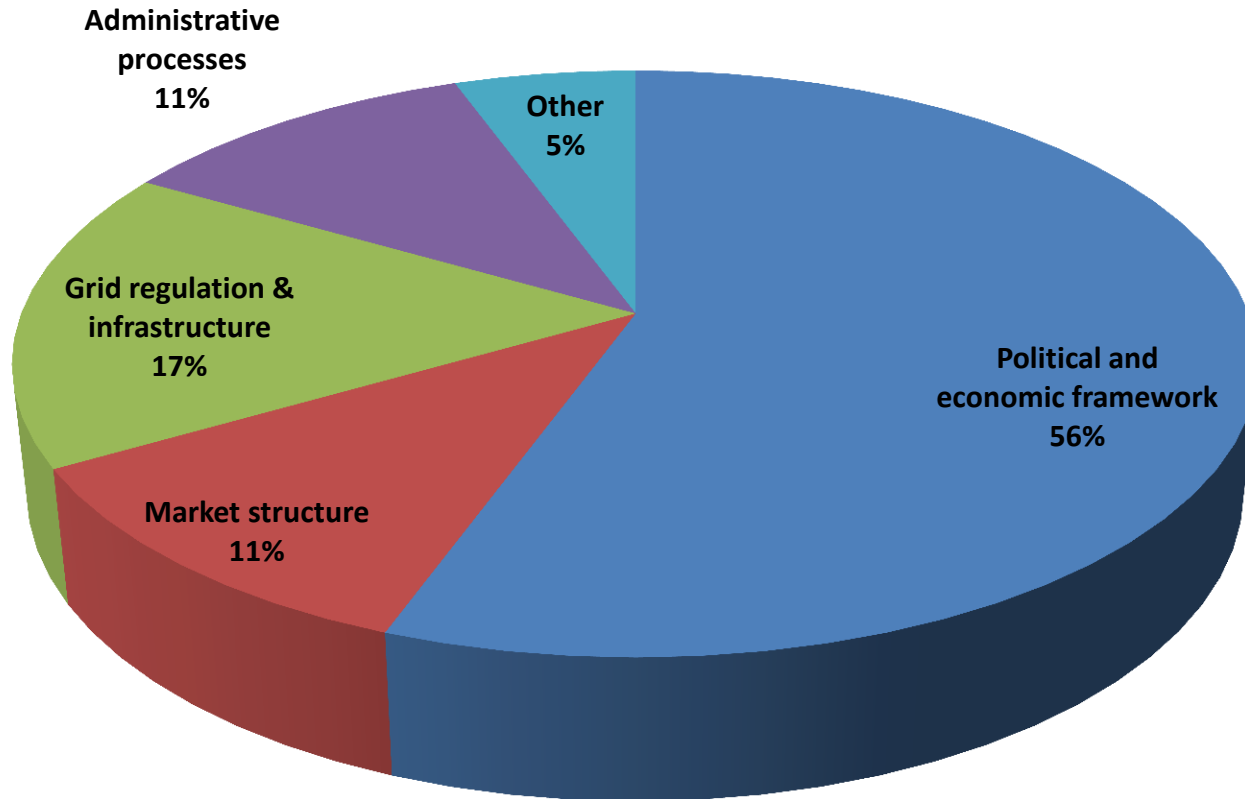


Share of RES-E Barriers per Main Category



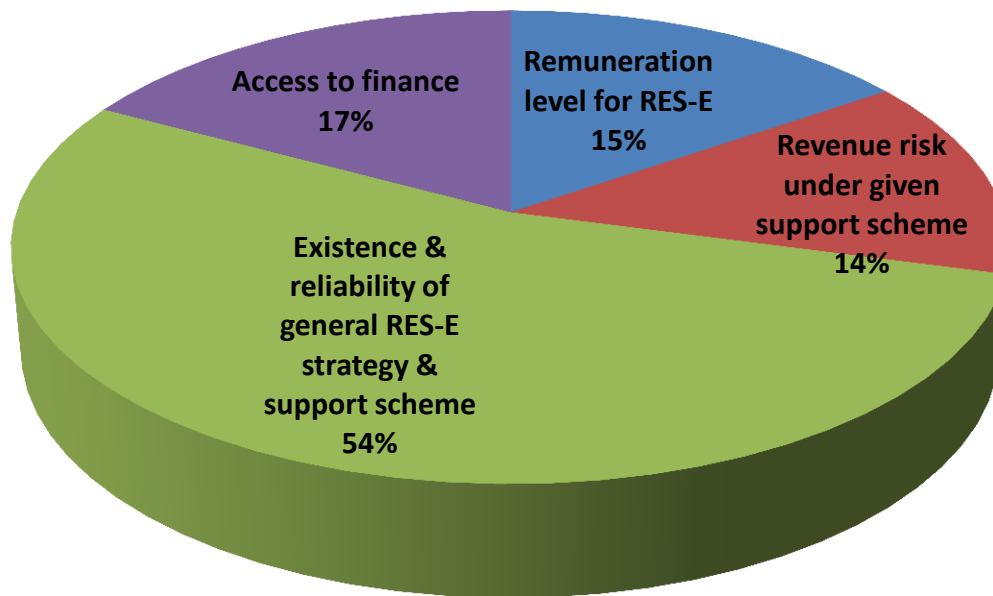


Bulgaria: Share of RES-E Barriers per Main Category










Political and economic framework: Sub-categories

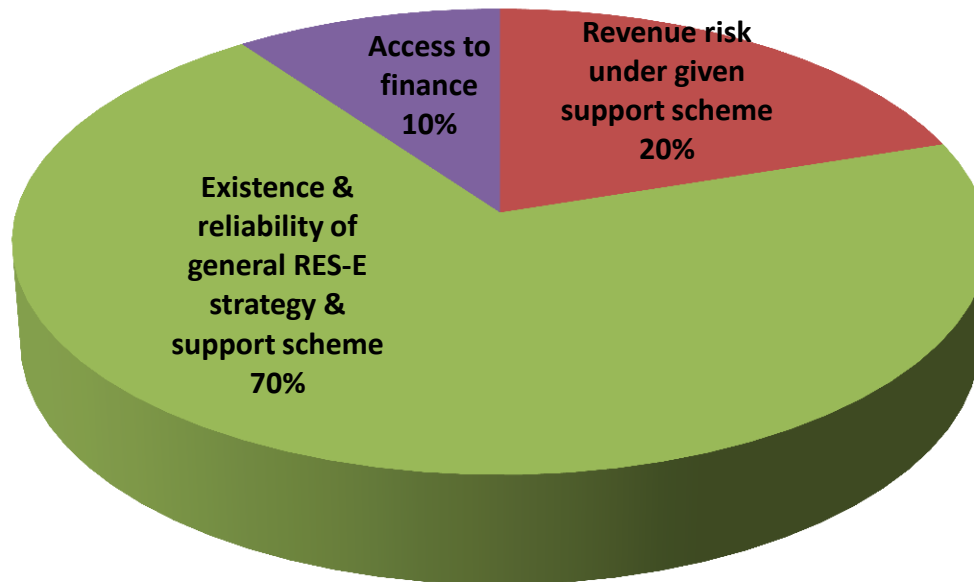


Barriers in this category

-  Caps for financial support hinder further RES deployment
-  Regulatory instability and deviations from power strategies
-  Retroactive cuts of remuneration for PV, wind and CSP electricity
-  Frequent changes and amendments of legislation
-  Complete abolishment of the existing RES-E support scheme and change to a new scheme with still unknown remuneration parameters



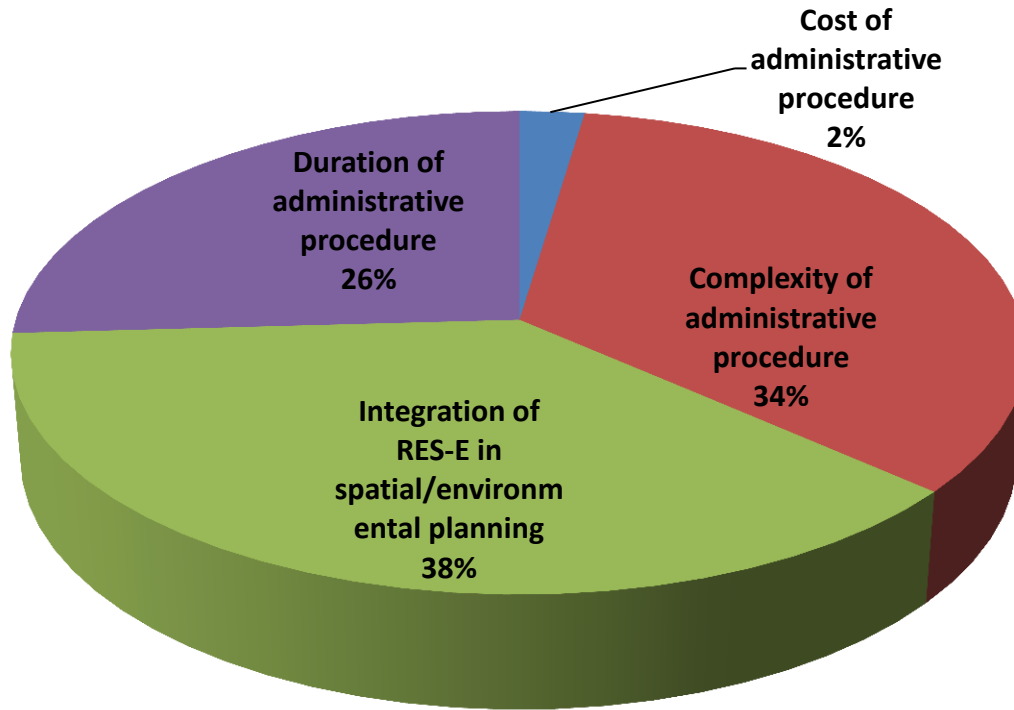
Bulgaria: Political and economic framework: Sub-categories





- Barriers in this category**
-  Abrupt and retroactive measures
 -  Breaching of laws by the government
 -  Moratorium on all kinds of new large-scale RES-E installations
 -  Avertedly inflated figures for renewable energy production
 -  Uncertain regulations and different interpretations of law



Administrative Processes: Sub-categories

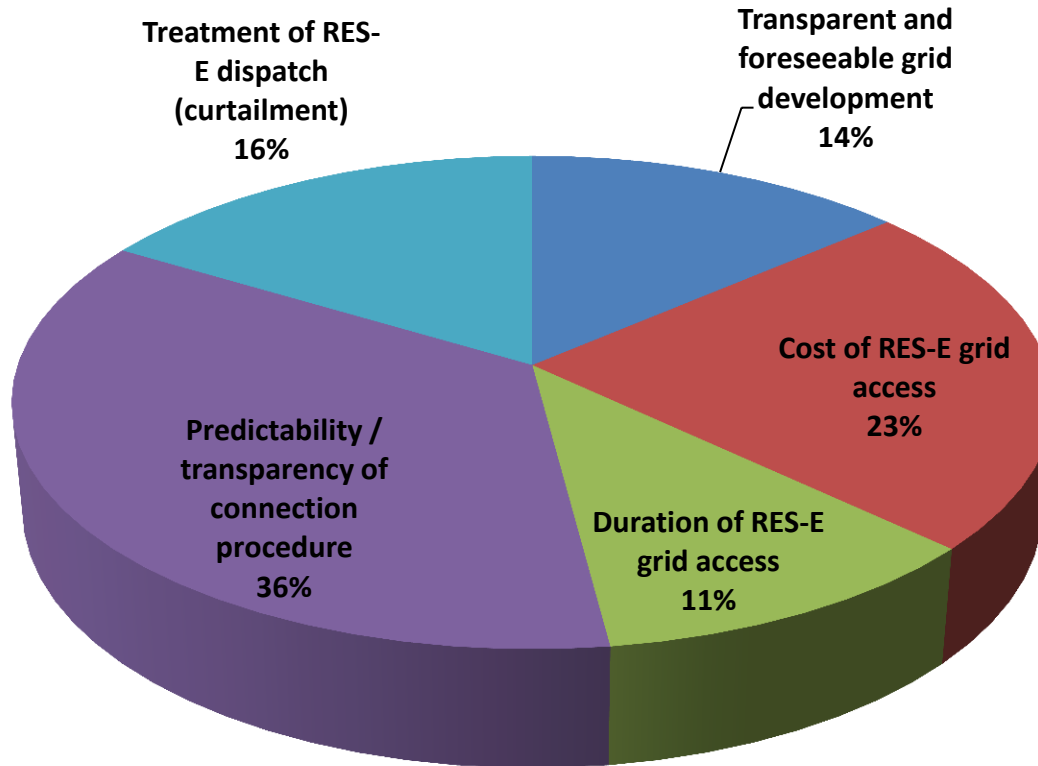


Barriers in this category

-  Lack of established presence for marine RE in the marine space
-  Military resistance to wind turbines
-  Land-use planning does not take into account wind energy potential
-  Ecological and agricultural restraints
-  Lack of local spatial development plans



Grid regulation & infrastructure: Subcategories



Barriers in this category

-  DSOs have announced connection moratorium
-  Arbitrary suspension on the side of distributors
-  Lack of definition of curtailment procedure
-  New Electricity Sector Law and draft Royal Decree for RES-E restricts priority access and dispatch for RES-E
-  Imposing restrictions on the generation of PV and wind plants



Conclusions

- **Barriers in RES-E sector more diversified, than in RES-H&C and RES-T**
- **Bulgaria: RES-H&C and RES-T sectors are almost non-existent**
- **Dominant category over all three sectors: political and economic framework**
 - **Also uniform dominant sub-category for all three sectors: Existence & reliability of general RES strategy & support scheme**
 - **Bulgaria: The most severe barriers were reported within this sub-category. If these barriers cannot be overcome, the further development of renewable energy is highly unlikely.**

Благодаря Ви за вниманието!



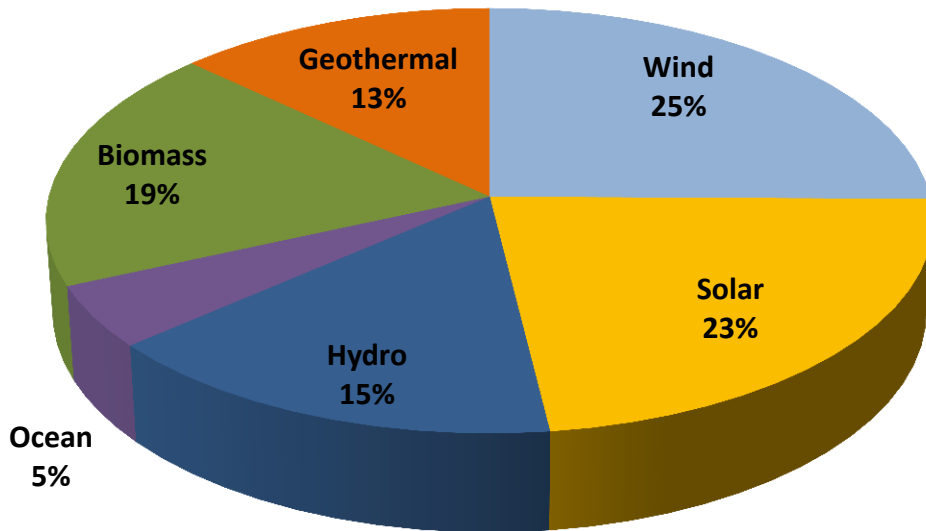
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ideas into energy.

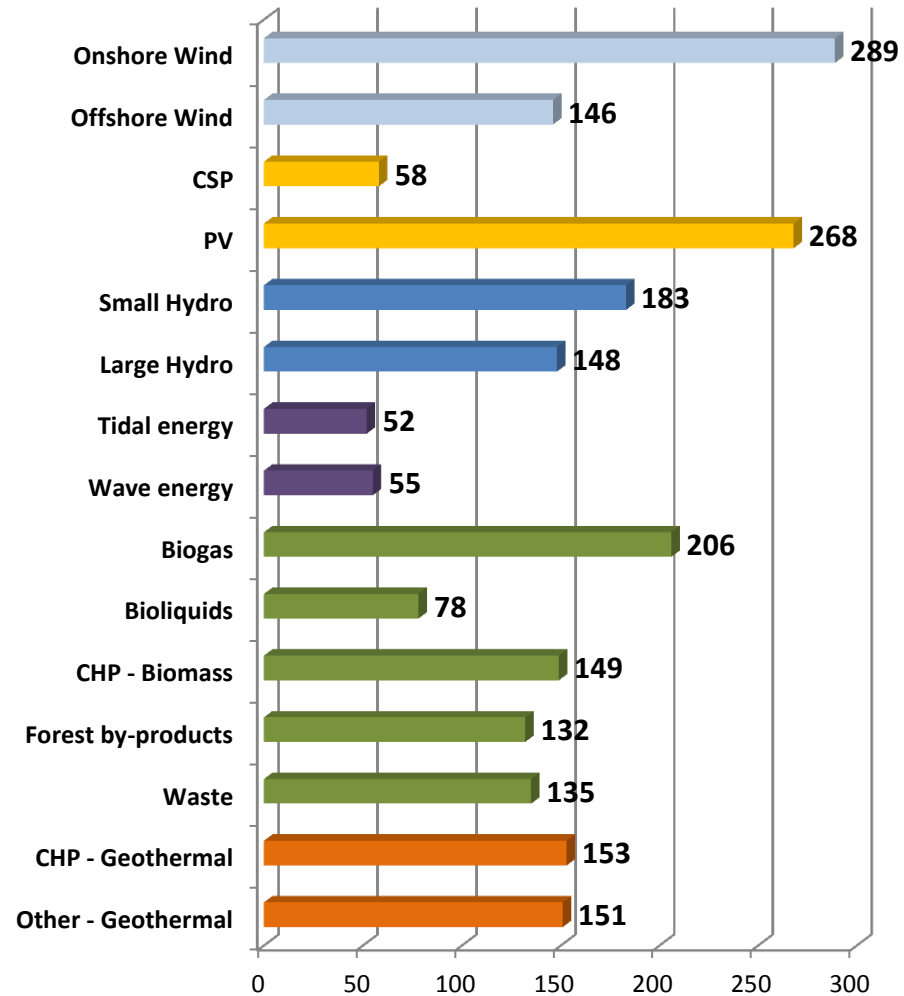


Additional Material

Share of RES-E Barriers per Technology



RES-E Barriers per Sub-Technology

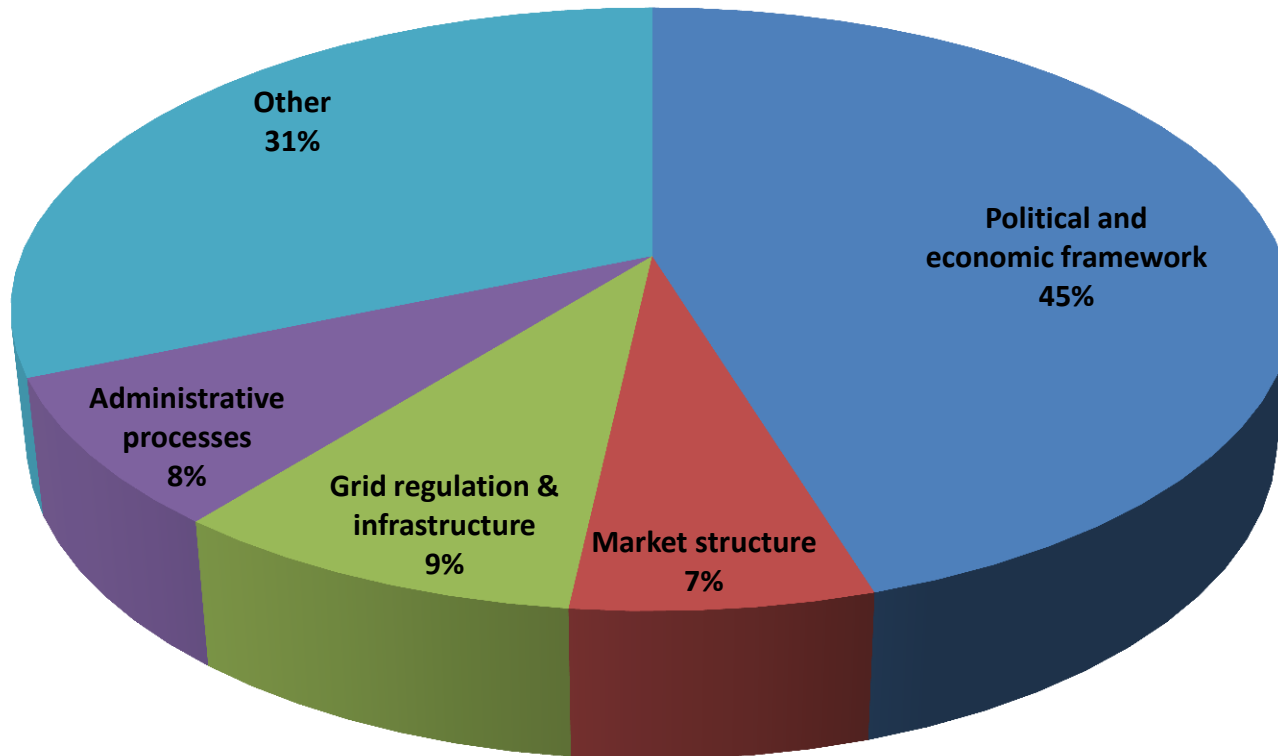




The RES-H&C Sector

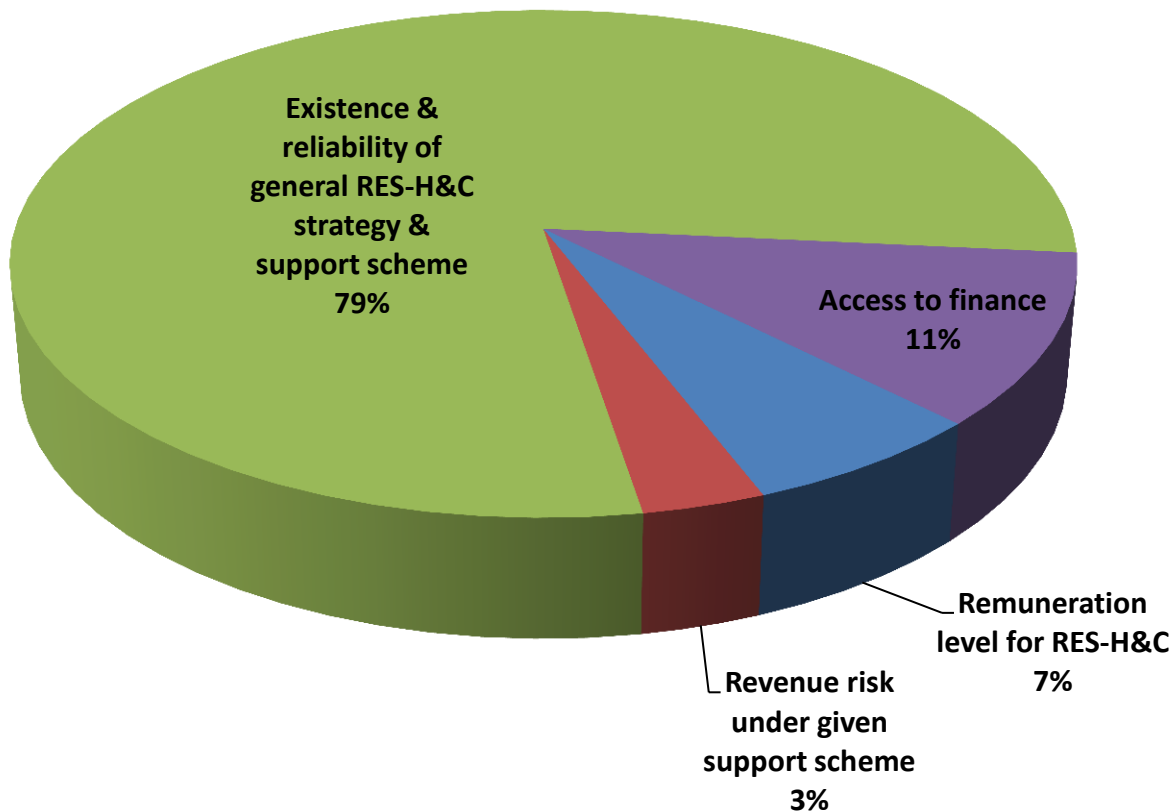


Share of RES-H&C Barriers per Main Category










Political and economic framework: Sub-categories



Barriers in this category

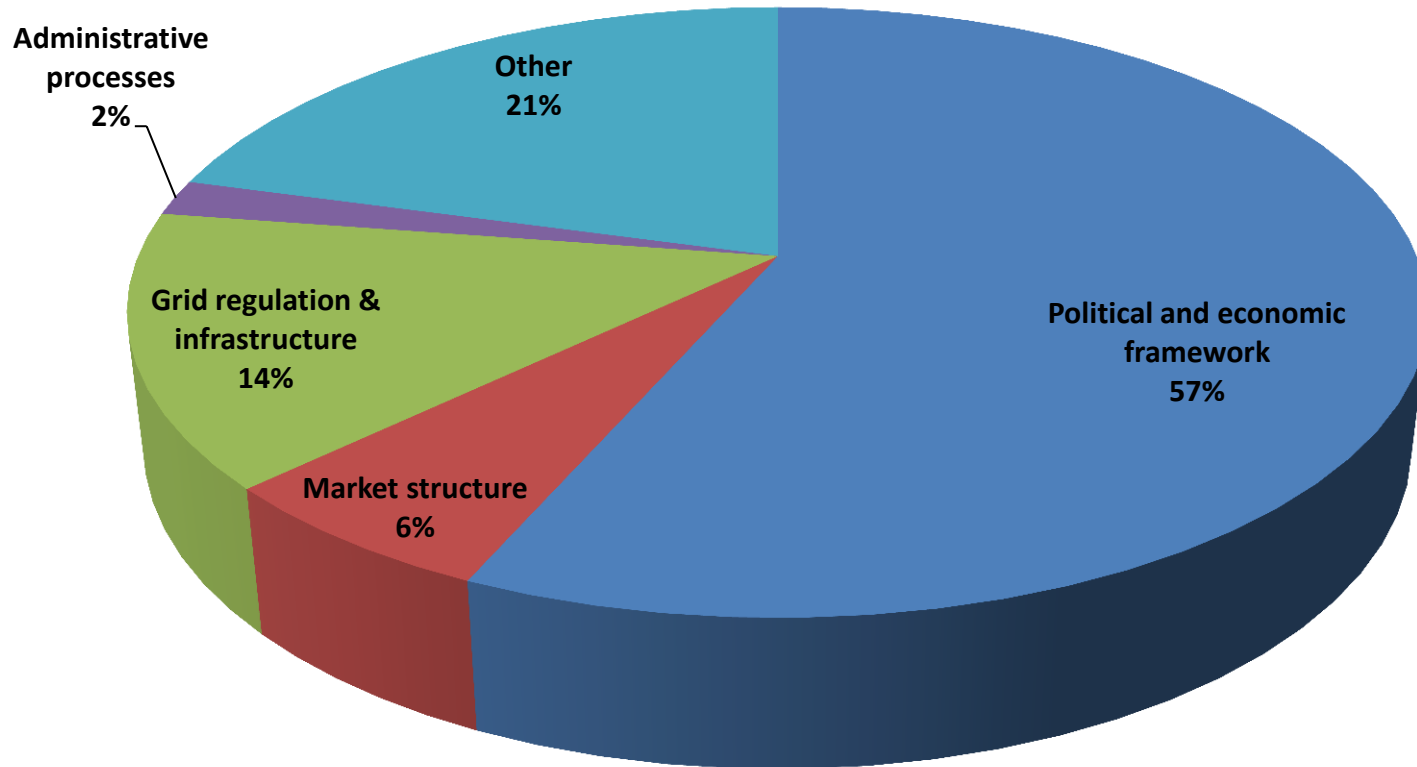
-  Poor enforcement of the EEWärmeG affecting new installations
-  Poor support scheme and lack of regulatory framework for establishment
-  Unbalanced Incentive Schemes
-  Absence of support mechanisms
-  Focus of the industry on single-family houses and multi-user dwellings



The RES-T Sector

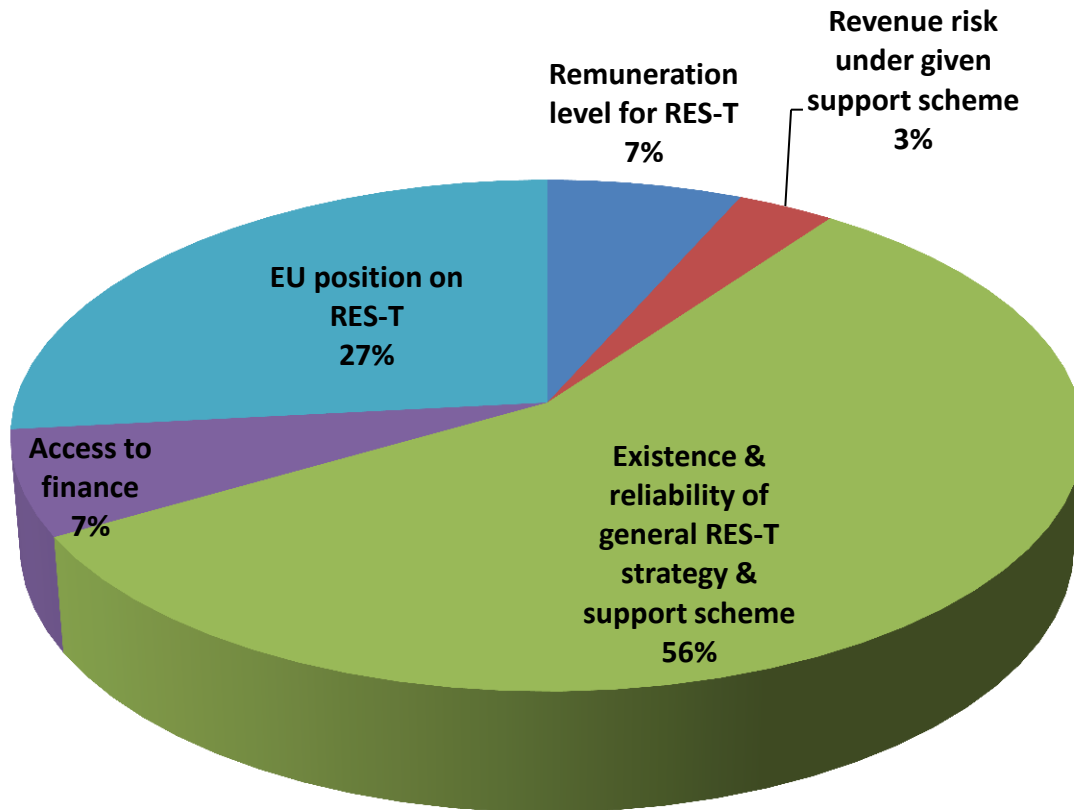


Share of RES-T Barriers per Main Category










Political and economic framework: Sub-categories



Barriers in this category

-  Lack of severity regarding the non-enforcement of the blending of 10% biofuels
-  Non-existence and effectiveness of a general RES-T strategy
-  Lack of regulatory stability and visibility of support policies in the long term
-  European Commission's proposal of 17 October 2012 for a 5% cap on the amount of first generation biofuels
-  Lack of targeted support mechanisms and incentives