

European  
Commission  
DG Environment



## Presentation of the results of the public consultation “Unconventional fossil fuels (e.g. shale gas) in Europe”

Brussels – June 7<sup>th</sup> 2013

Project under Framework Contract for economic analysis ENV.F.1/FRA/2010/0044

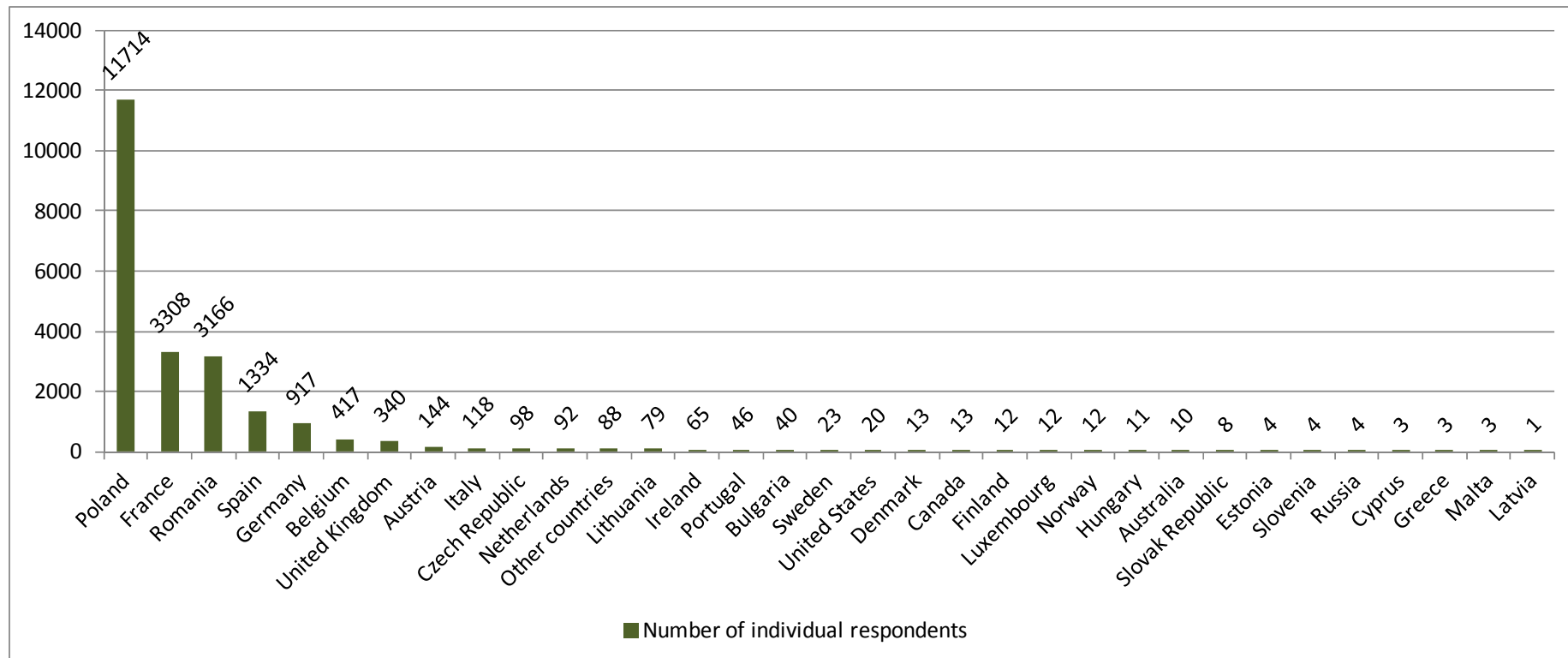
Consortium co-ordinator: Institute for Environmental Studies  IVM Institute for  
Environmental Studies

Project leader: BIO Intelligence Service



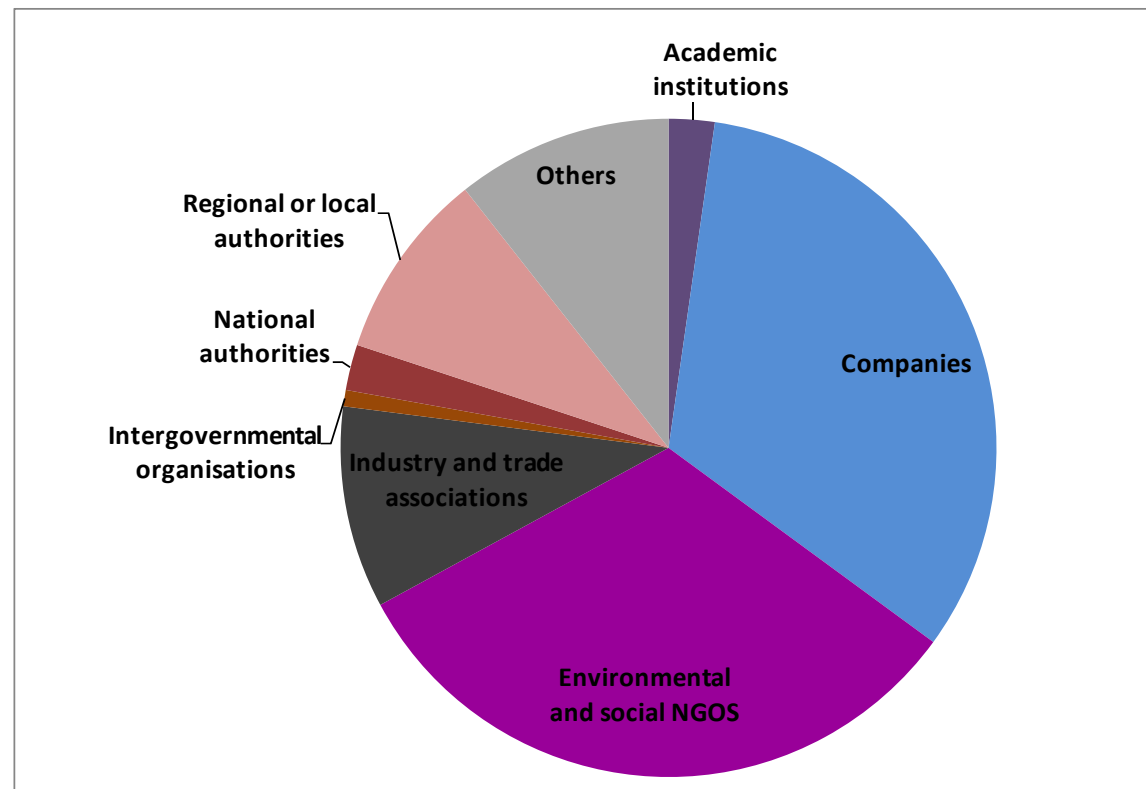
- ❑ **The public consultation on unconventional fossil fuels (e.g shale gas) was launched on 20 December 2012 and closed on 23 March 2013**
- ❑ The context of the public consultation is the **preparation of the impact assessment** of the “Environmental, Climate and Energy Assessment Framework to Enable Safe and Secure Unconventional Hydrocarbon Extraction” initiative.
- ❑ This analysis provides an understanding of **the views on opportunities and challenges and possible ways to address the challenges associated with unconventional fossil fuels (e.g shale gas) extraction expressed by citizens, organisations and authorities** across the EU (and beyond) through the public consultation.

- ❑ **22,875 respondents:**
  - ❑ 22,122 responses from individuals
  - ❑ Most respondents are from Poland, France, Romania, Spain and Germany



- **783 respondents covering 696 organisations:**
  - 666 responses on behalf of 614 institutions gathering various types of stakeholders
  - 87 responses on behalf of 82 public authorities

**Distribution of respondents** according to the type of organisations they represent

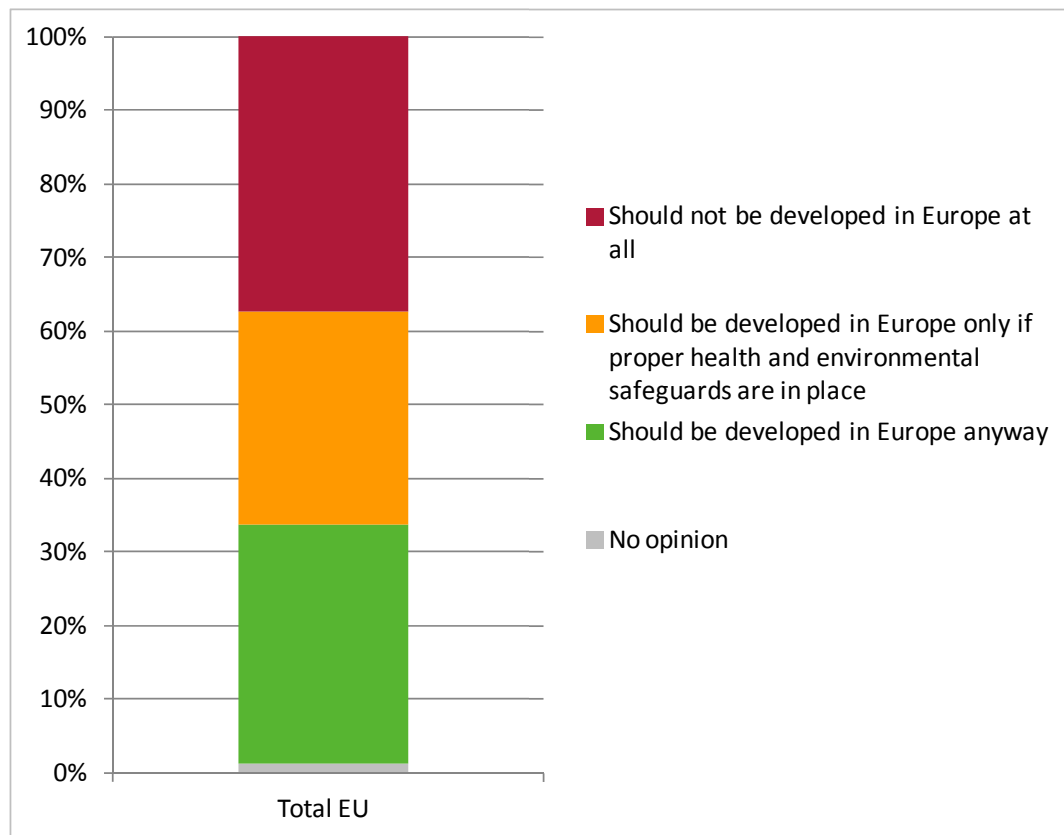


## Methodology for analysis of the results

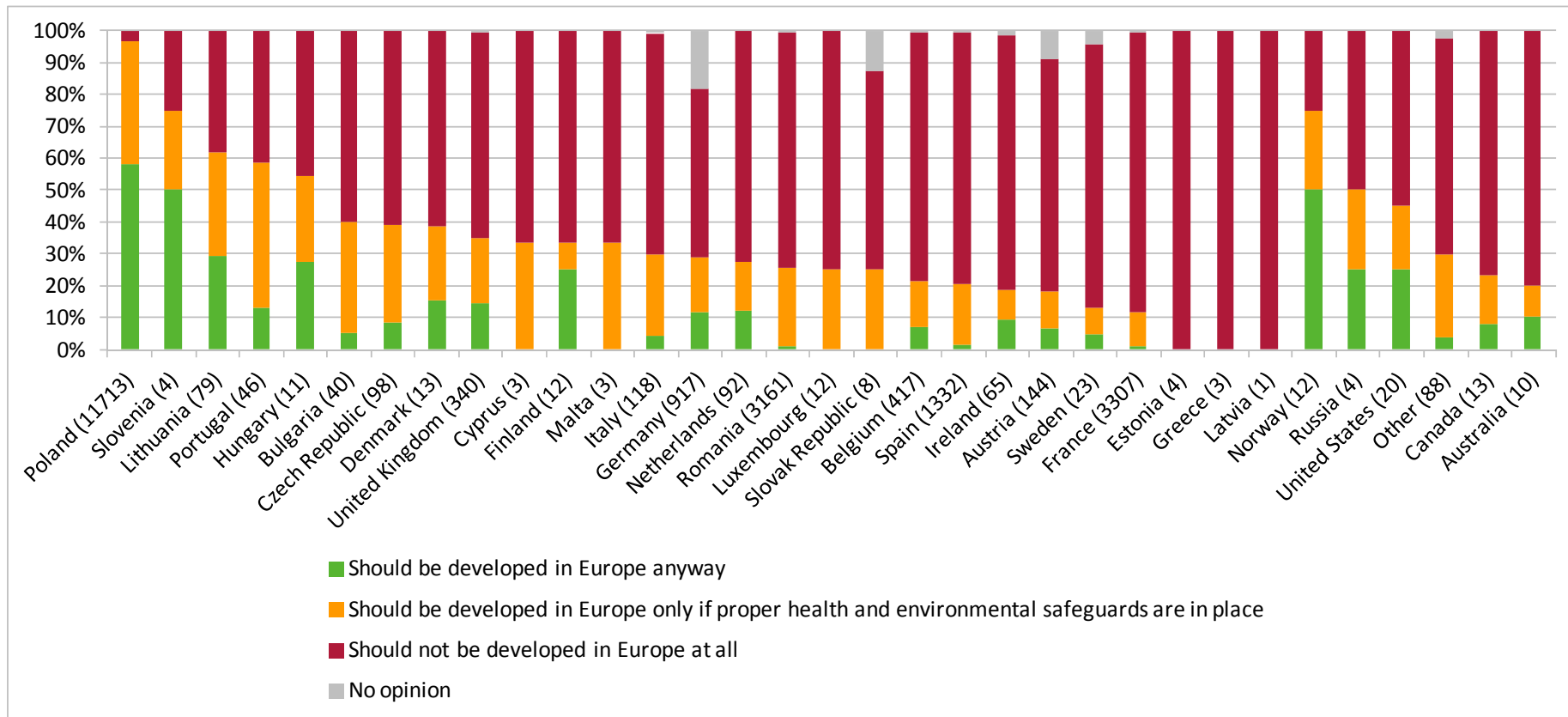
- Descriptive statistics provided for each section of the questionnaire**
- Analysis of correlations between responses**
- There is no double counting of organisations, but also no deletion of different responses:**
  - If there are several respondents from the same organisation, all their answers are accounted for, but each organisation has a weight of one
- On-going analysis of open questions – random sampling of answers for individual respondents**
- For some questions, analysis of what the results would have been if participation had been more even across countries (in the report)**
  - Weighted averages statistics, only provided in parallel to direct averages, not replacing them

- ❑ **Three groups of respondents**
  - ❑ Respondents in favour of the development of unconventional fossil fuels, identifying many potential benefits.
  - ❑ Respondents that think that strict environmental and health safeguards should be put in place, more likely to want a regulation at the EU level.
  - ❑ Respondents against, identifying many potential challenges, with some of them wanting a ban of unconventional fossil fuels in all the EU.
  
- ❑ **However, a large majority of respondents agree on the lack of adequate legislation, the need for public information and the lack of public acceptance of unconventional fossil fuels (e.g shale gas)**
  
- ❑ **Among the policy options, “doing nothing at EU level” is the least favoured option by the majority of respondents**

## Opinion of individuals from EU Member States about the development of unconventional fossil fuels (e.g. shale gas) in Europe

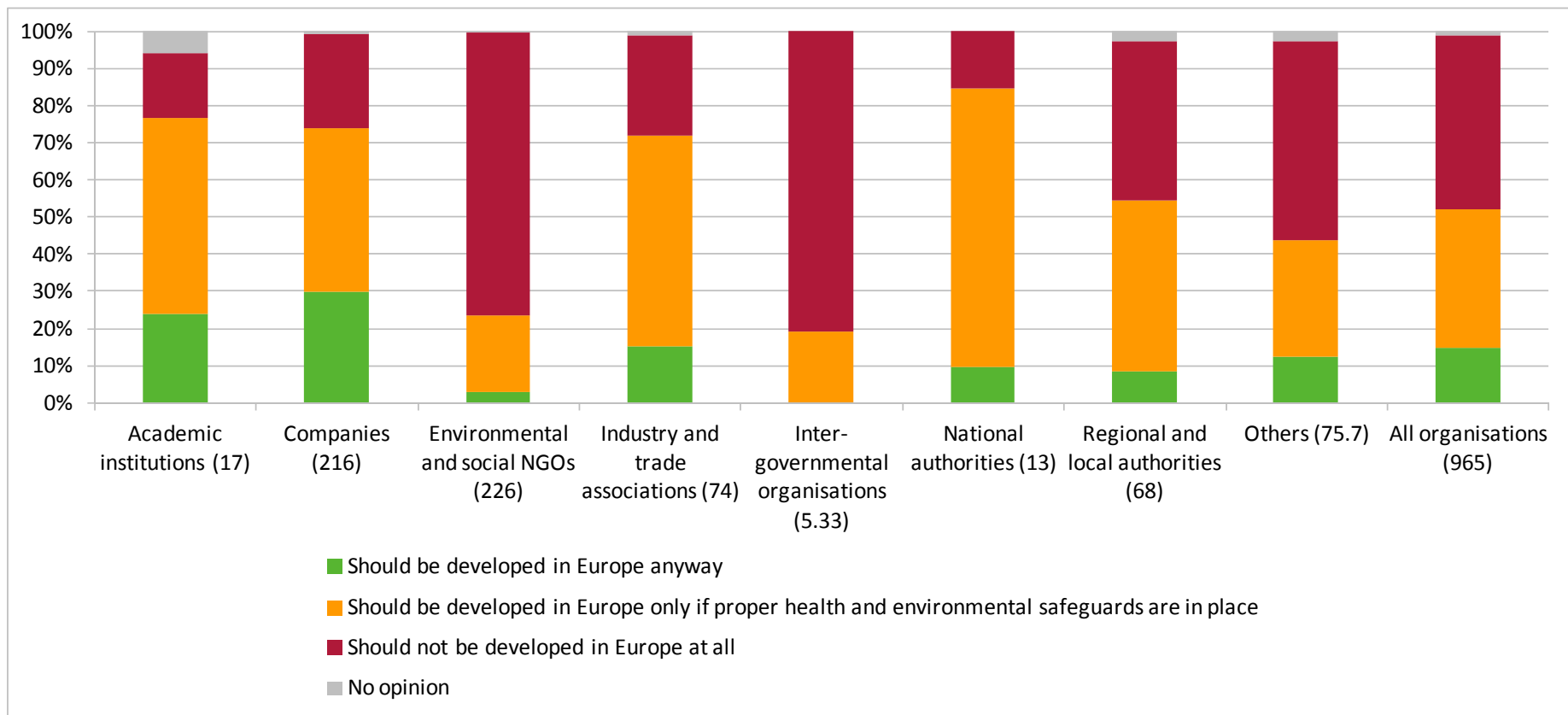


## Opinion of individuals about the development of unconventional fossil fuels (e.g. shale gas) in Europe by country of residence (share of respondents)

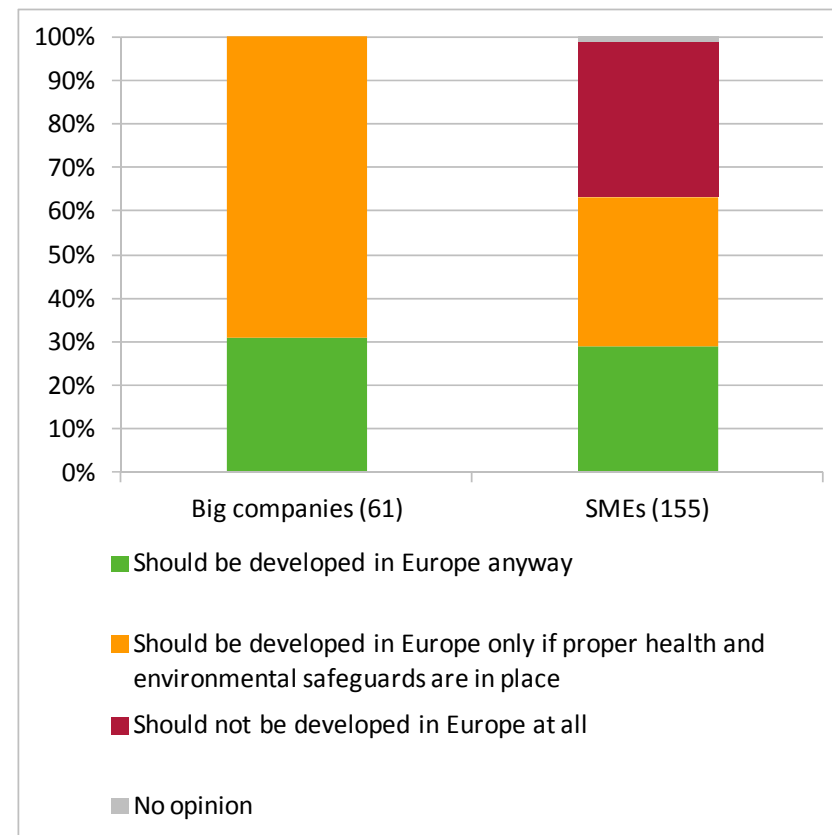
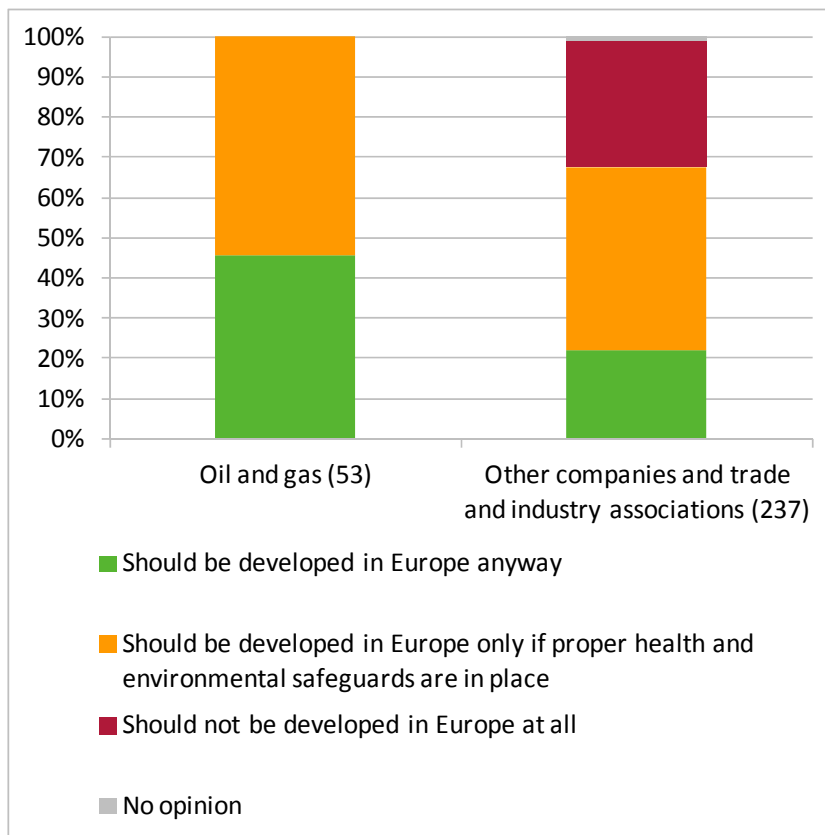




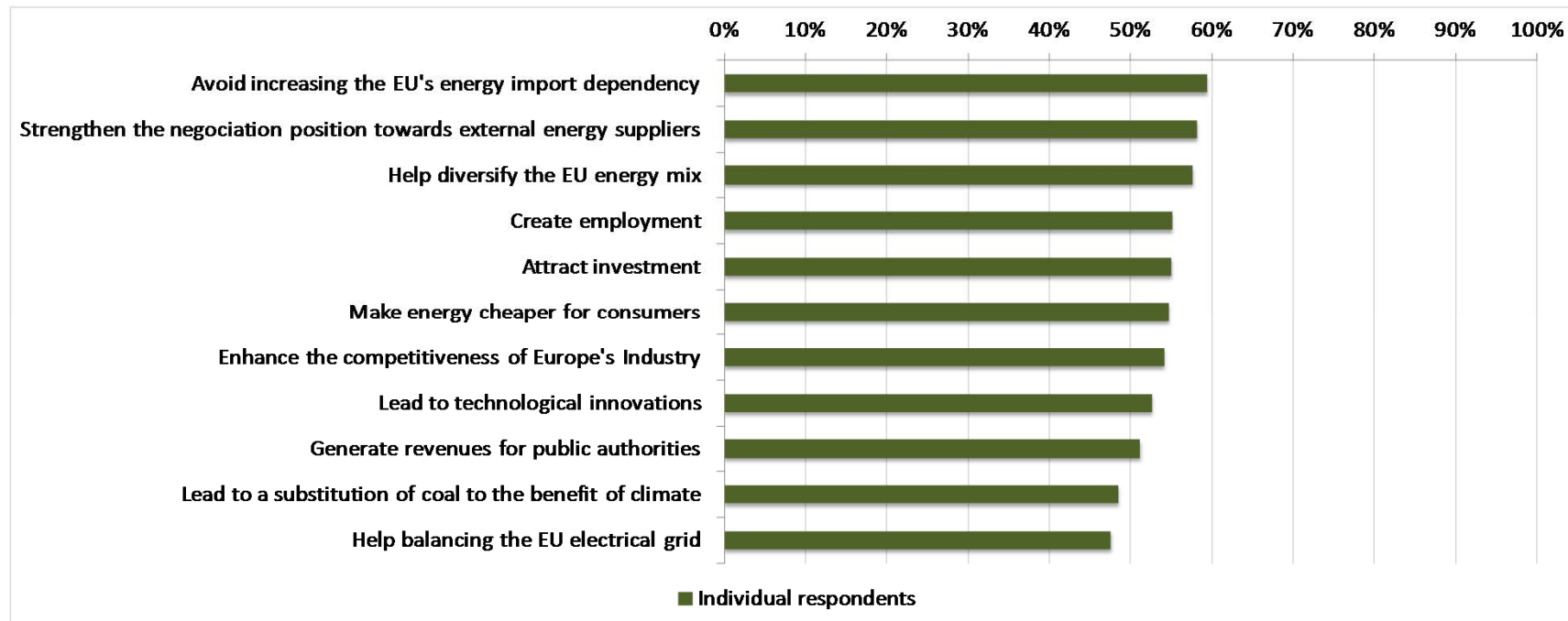
## Opinion of organisations about the development of unconventional fossil fuels (e.g. shale gas) in Europe by type of organisations



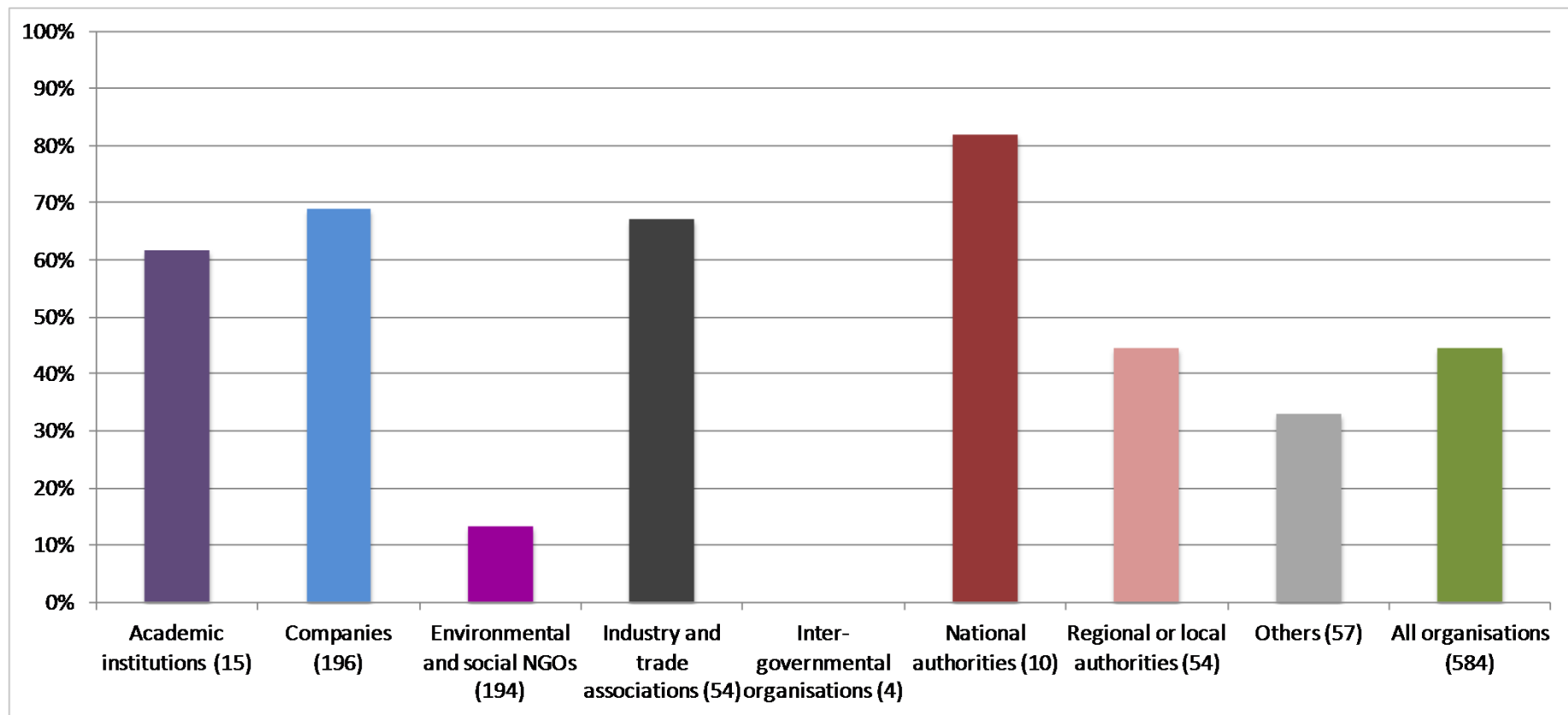
## Opinion of companies and trade and industry associations about the development of unconventional fossil fuels (e.g. shale gas) in Europe by sector and by size (for companies only)



Share of individual respondents from EU countries stating that a potential benefit could be major or significant according to the potential benefit



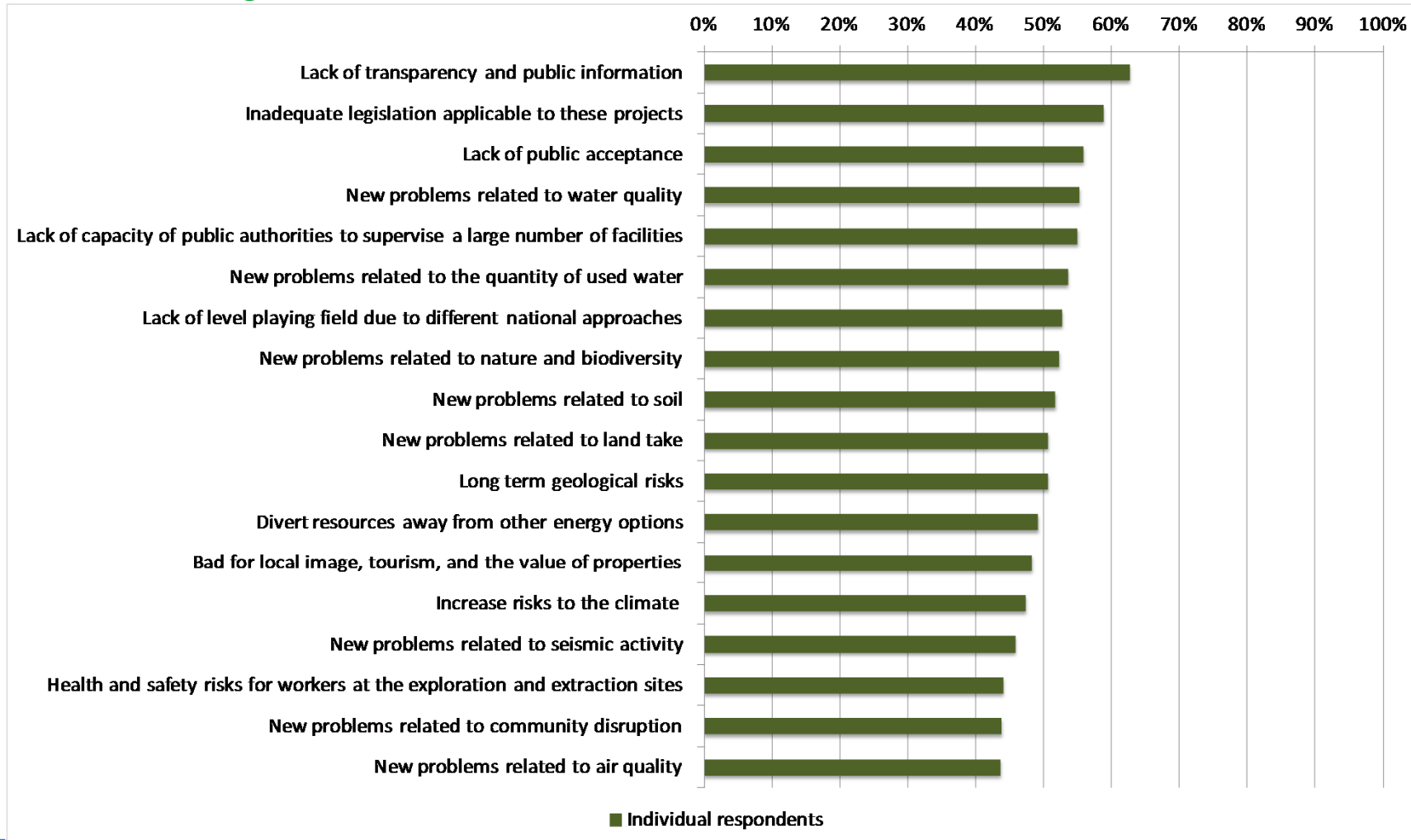
### Average share of potential benefits considered as major or significant by type of organisations from EU countries



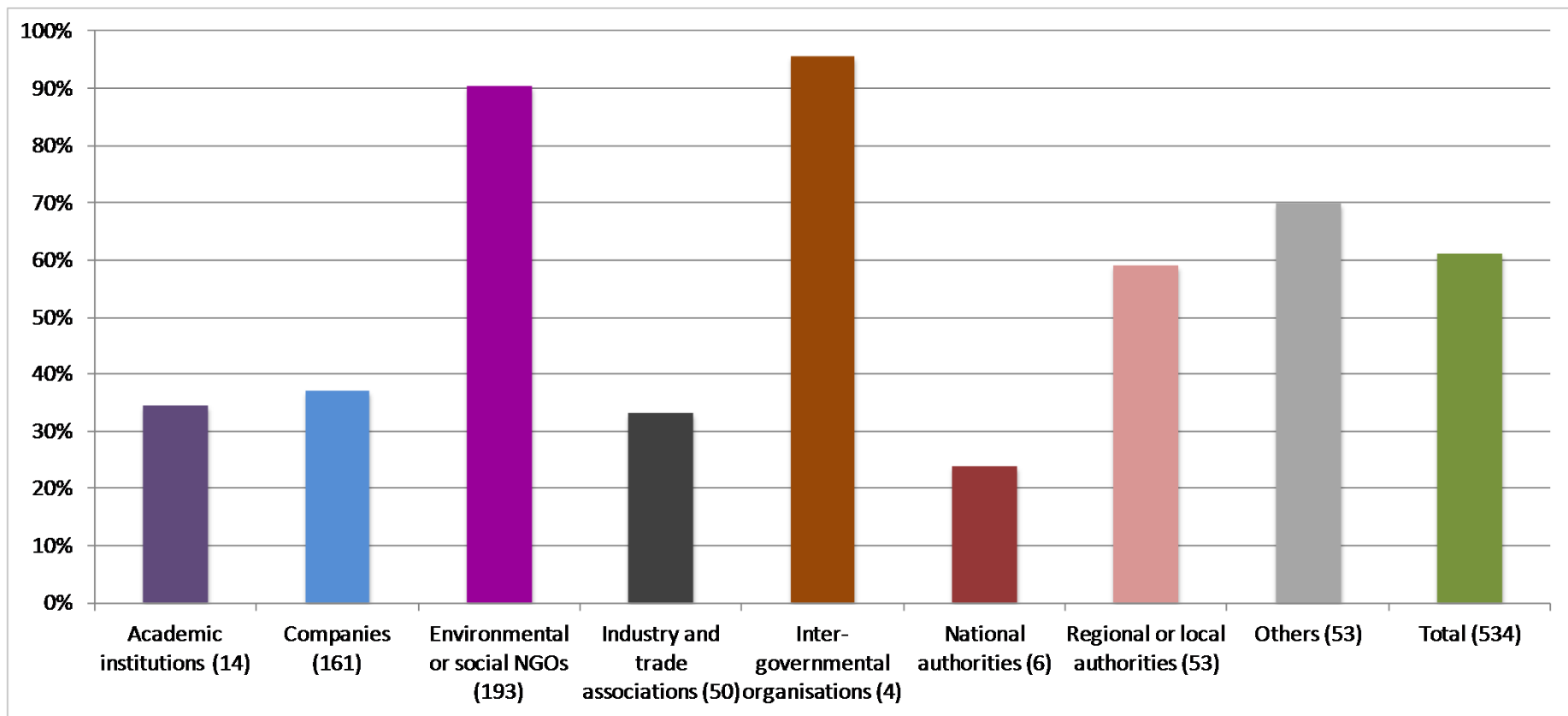
### Main themes appearing in the answers to the open-ended question on additional benefits

- Potential benefits for EU economy** (reducing cost of implementation of EU climate policy, local development, scientific development)
- Potential benefits for EU industry** (reindustrialisation, chemical industry, natural gas vehicles, etc.)
- Potential benefits for innovations in technology** (Development of new extraction and drilling methods)
- Potential benefits for energy security and access to energy** (energy poverty, energy security, etc.)

## Share of respondents from EU countries stating that each issue could lead to major or significant challenge



## Average share of potential challenges considered as major or significant by type of organisation from EU countries



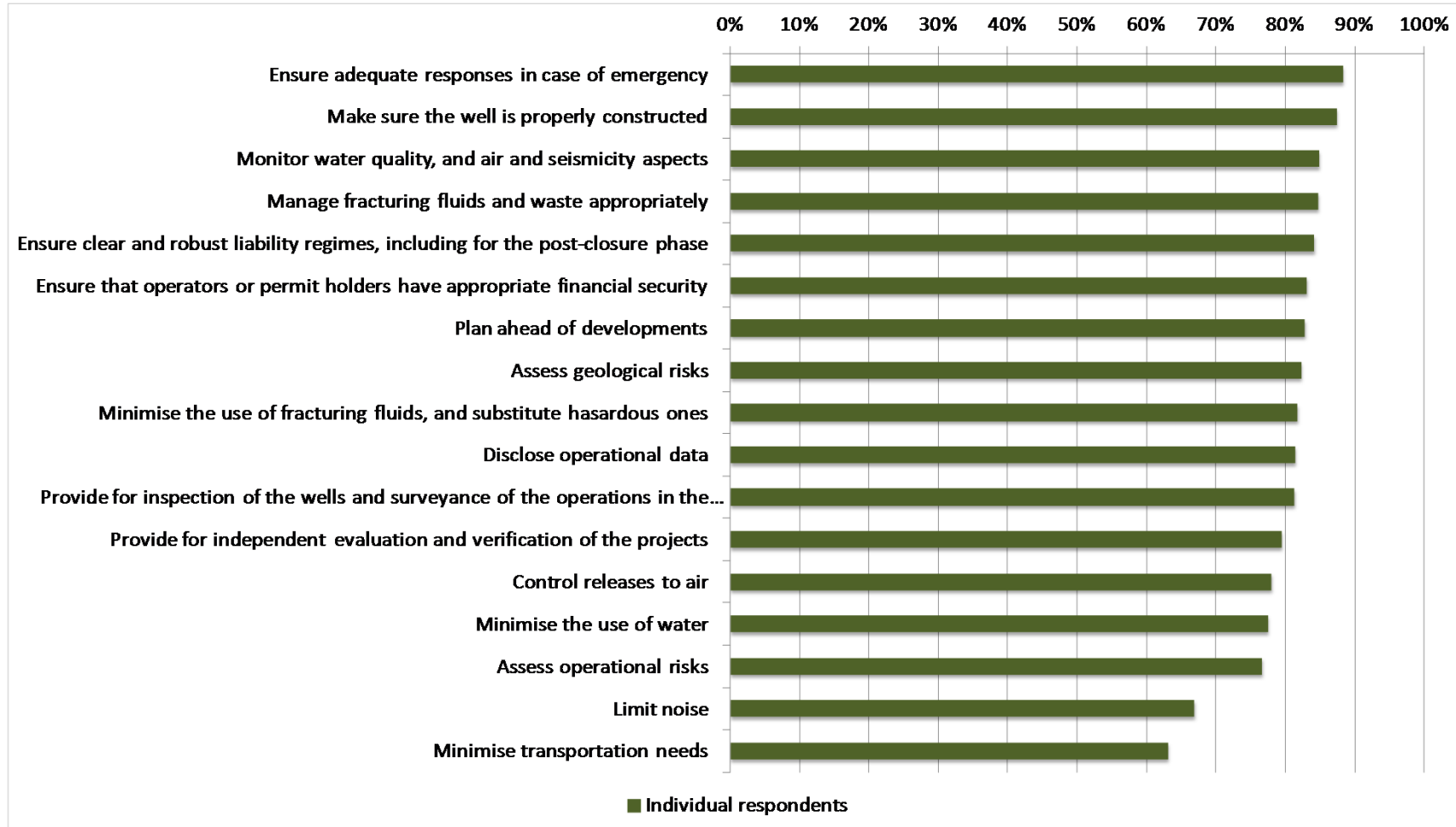
### Main themes appearing in the answers to the open-ended question on additional challenges

- Potential legal and political failures** (inconsistency in application of existing EU legislation)
- Risk of conflicts** (eg with third countries)
- Potential land and soil issues** (e.g. reduction of agricultural and breeding lands)
- Potential lack in technology knowledge** (insufficient knowledge on consequences from the hydraulic fracturing process)
- Potential long term issues** (rehabilitation of the site after cessation of the activity, risks for local populations)



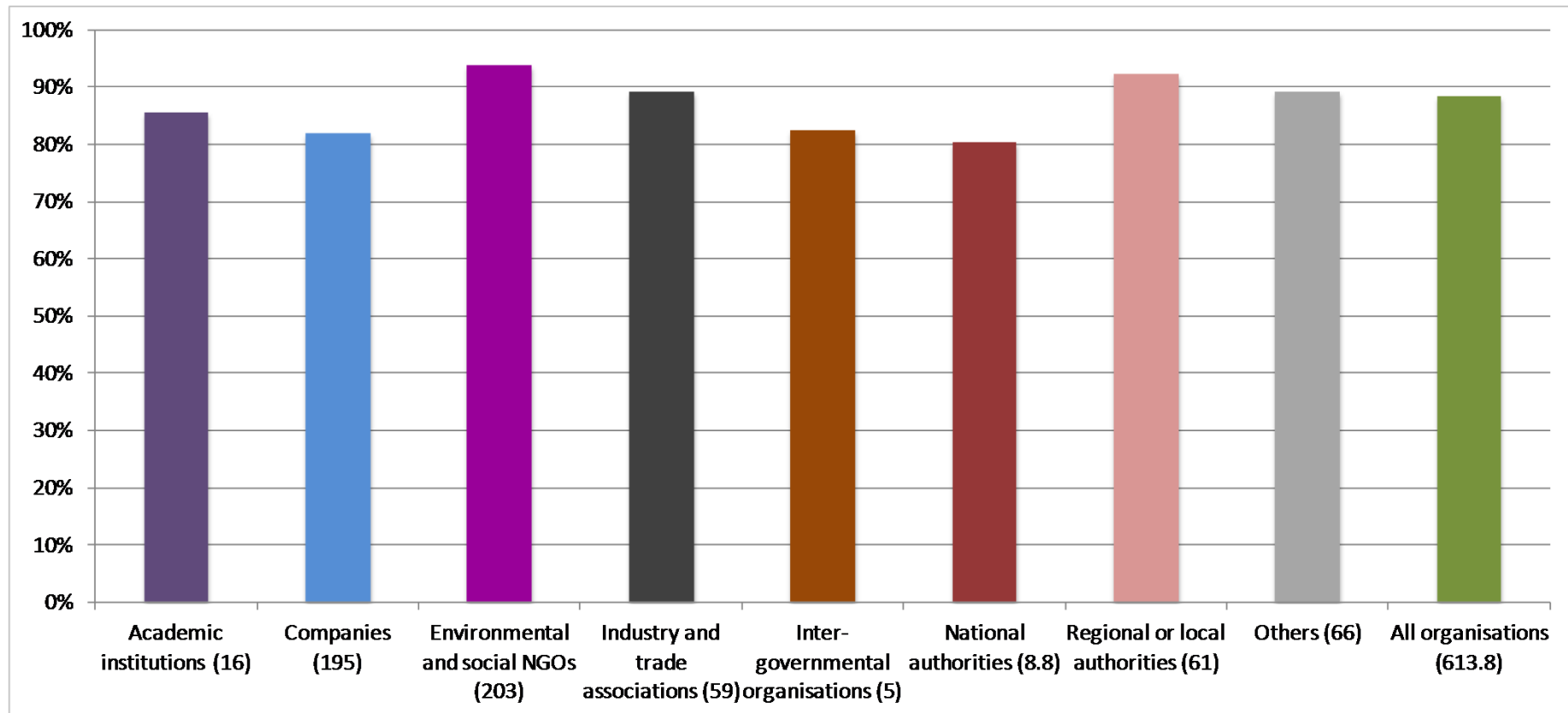
## IV – Recommended measures to avoid or minimise challenges of unconventional fossil fuels as identified by respondents (1/3)

### Strong support for all the measures proposed to avoid or minimise the challenges



## IV – Recommended measures to avoid or minimise challenges of unconventional fossil fuels as identified by respondents (2/3)

### Average share of measures considered as very important or important by type of organisations



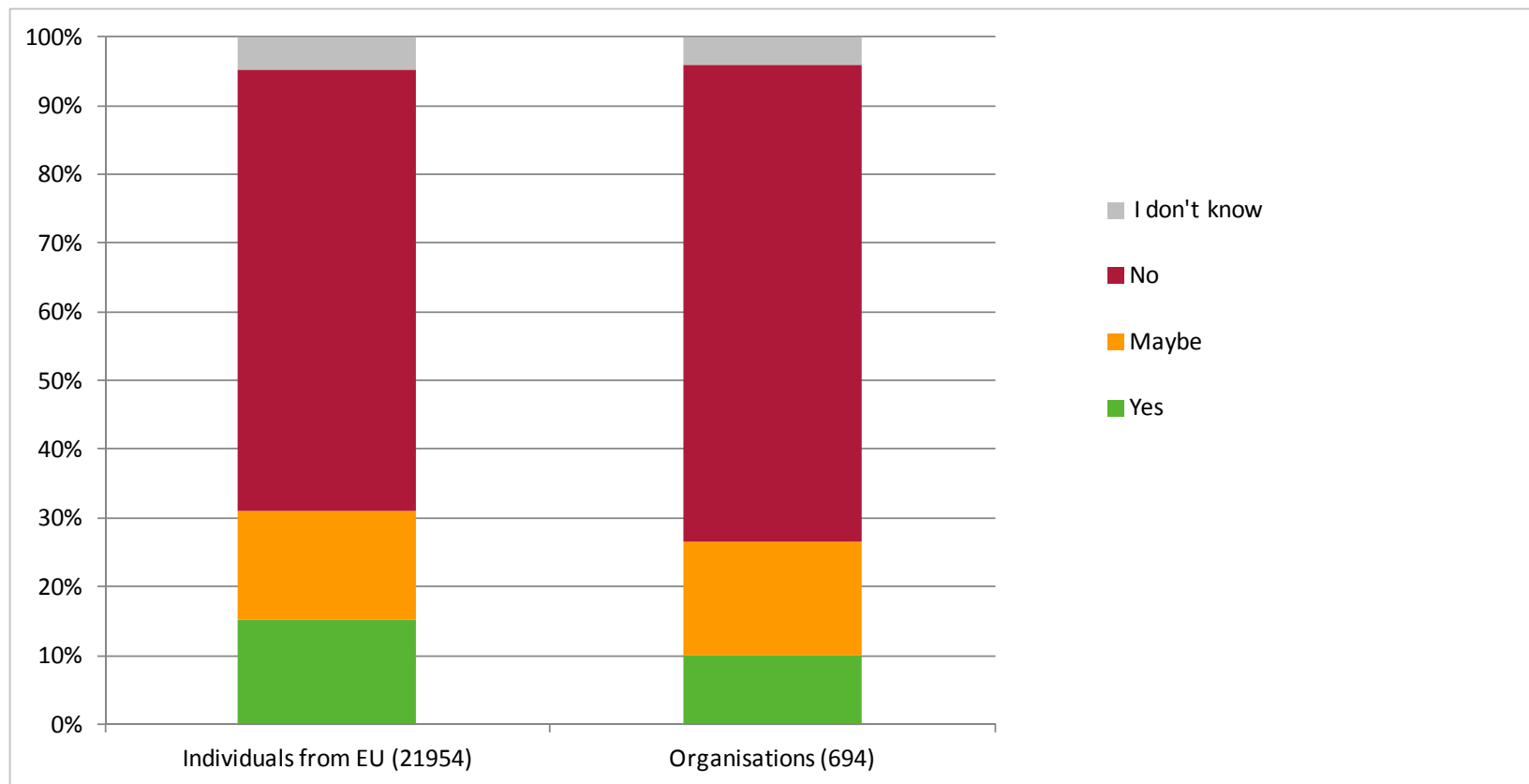
On this question, no difference was found between oil and gas and other companies

## IV – Recommended measures to avoid or minimise challenges of unconventional fossil fuels as identified by respondents (3/3)

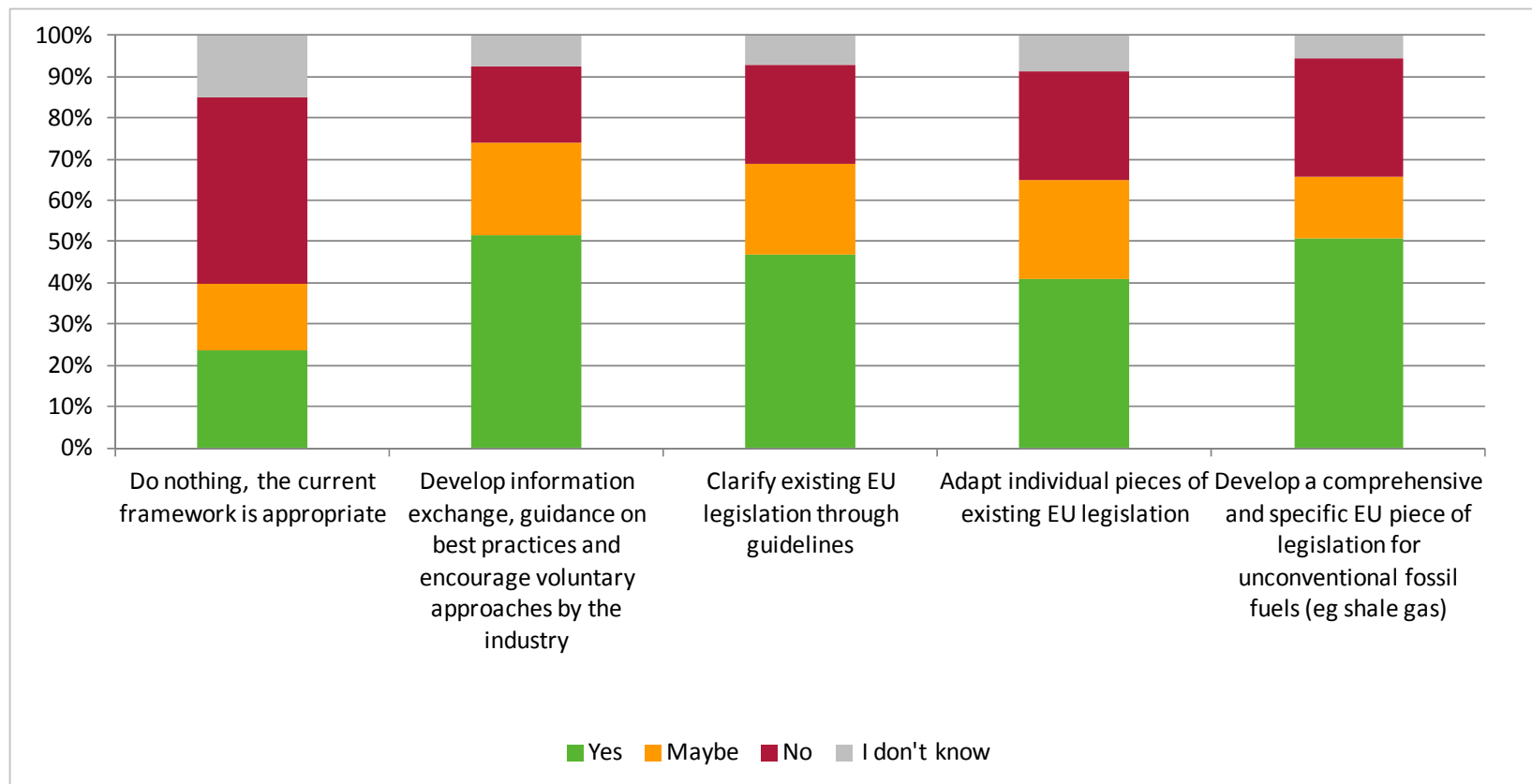
### Main themes appearing in the answers to the open-ended question on additional measures

- Legal options to be implemented** (e.g. prohibit exploitation where drinking water is extracted, high level of law enforcement)
- Information needs** (evaluate risks and benefits, closely monitor exploration areas)
- Technological standards to be implemented** (develop industry standards)
- Innovation needs** (innovative alternative exploitation methods)

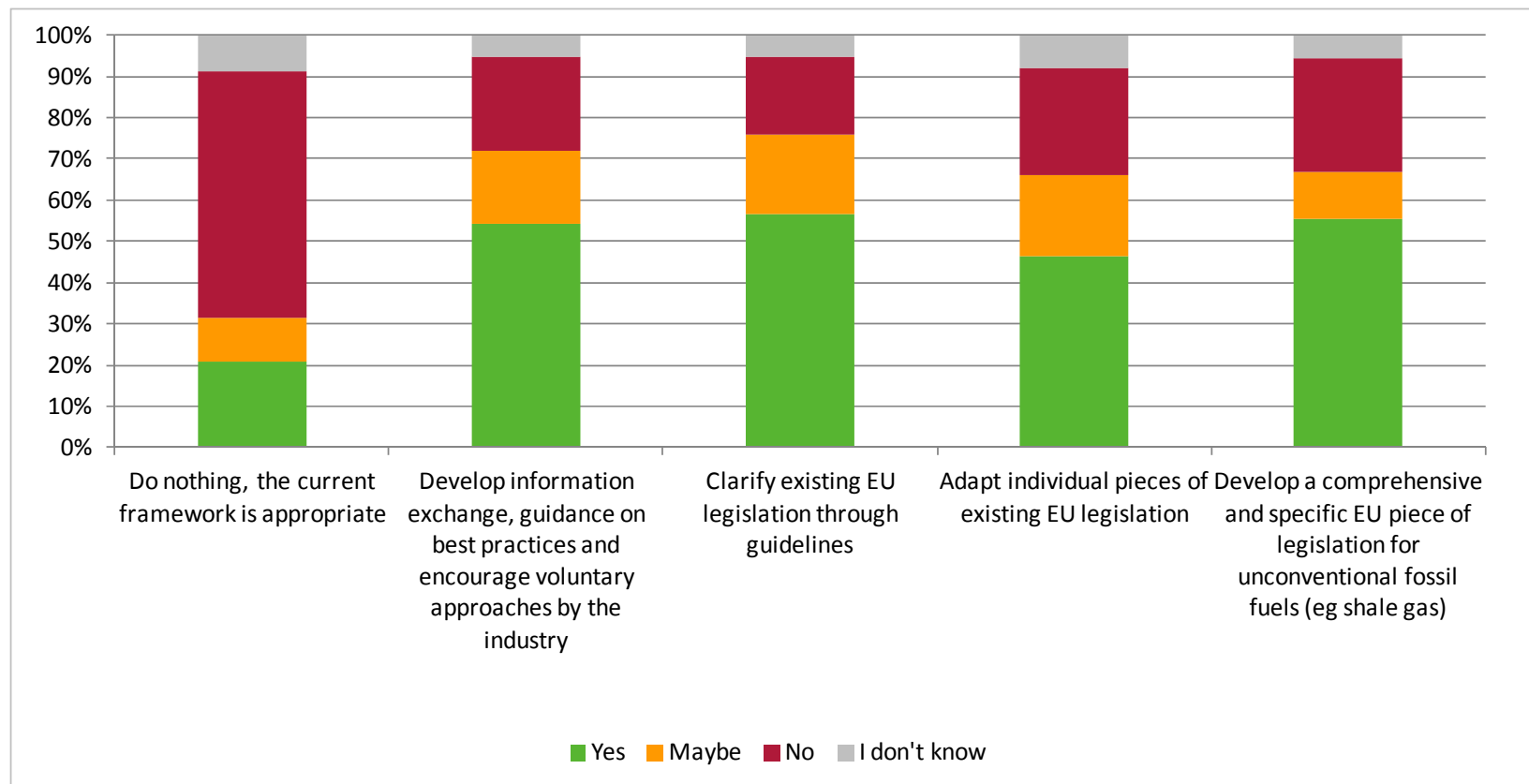
## Readiness of respondents to change their opinion about unconventional fossil fuels (e.g. shale gas) development if measures were implemented



### Answers from individual respondents on policy options to address the identified challenges and risks at EU level



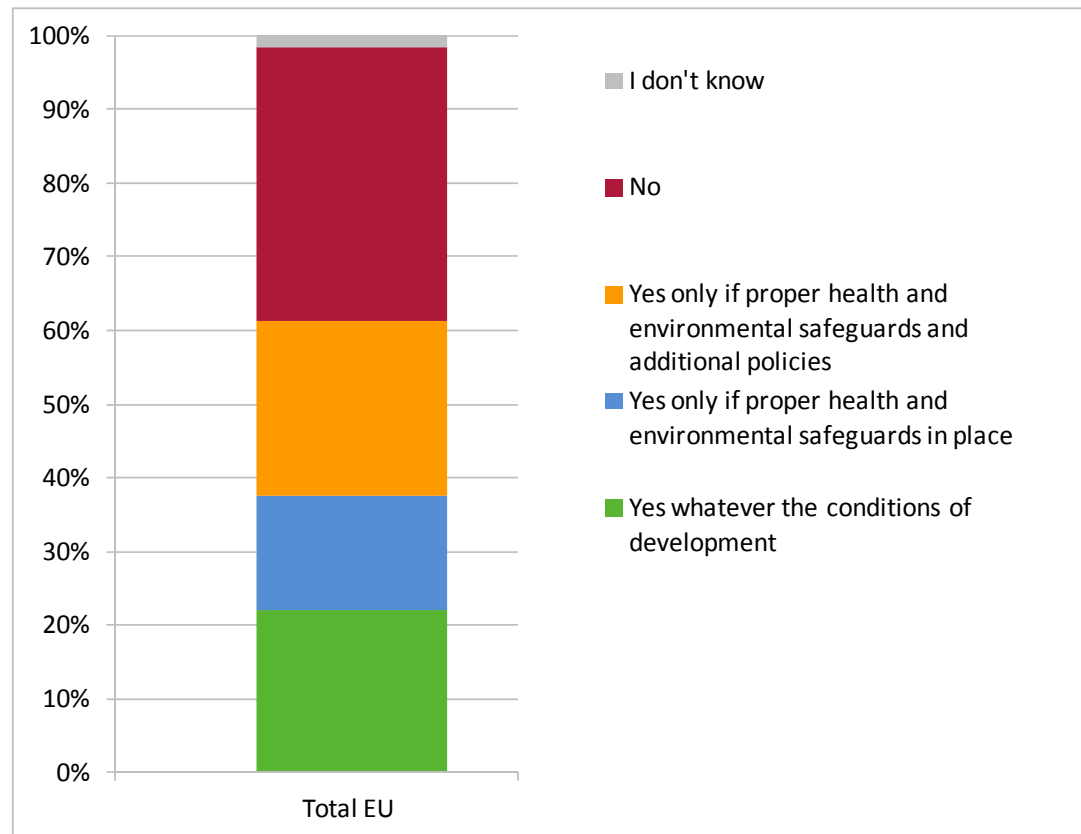
### Answers from all organisations on policy options to address the identified challenges and risks at EU level



### **A very large majority of respondents considered that information needs were important or very important**

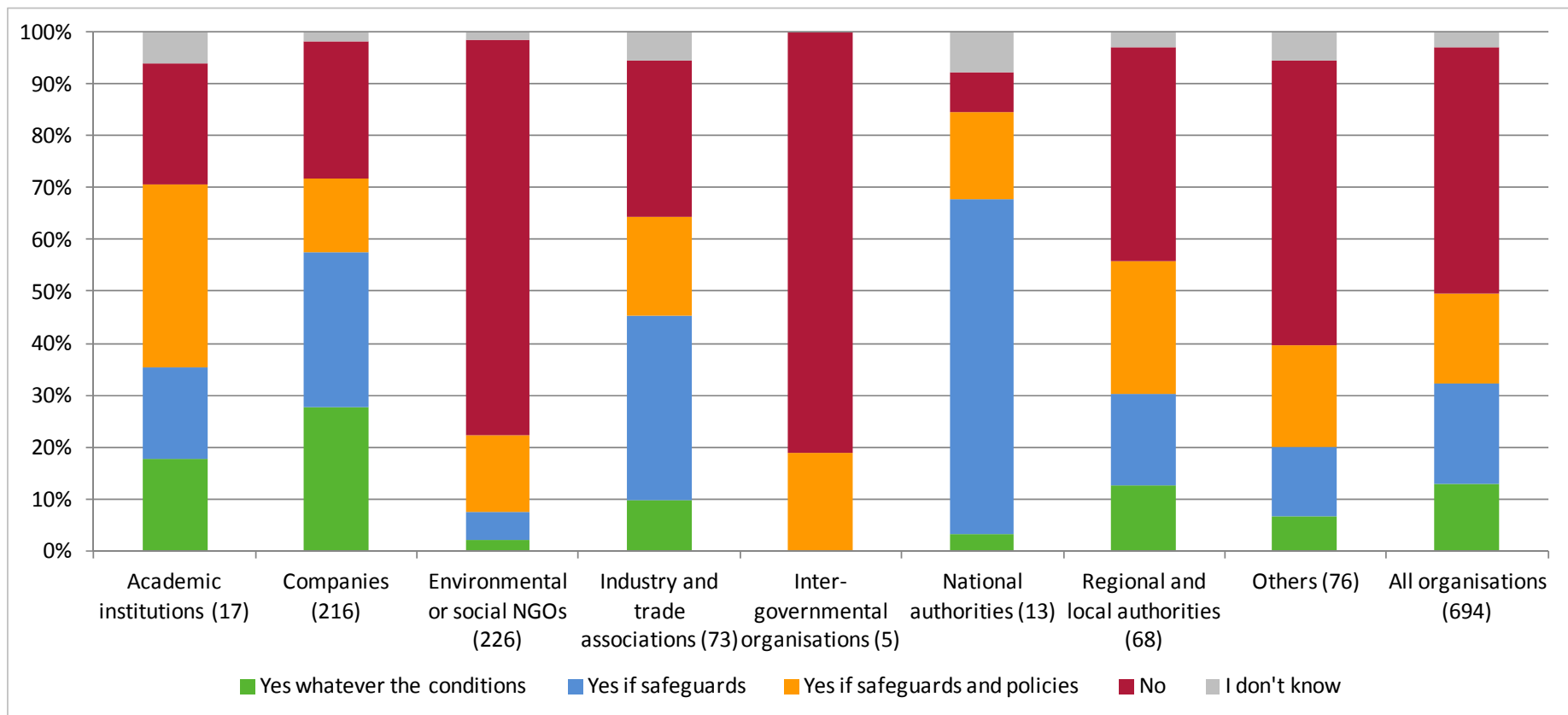
- Information on planned developments
- Information about operators, their licences and permits
- Baseline data (e.g. data on water and air quality prior to operations)
- Operational data (e.g. volumes of water used; chemical additives used)
- Information on incidents associated with exploration and extraction
- Information on potential risks associated exploration and extraction
- Information on potential benefits

## Opinion of individual respondents from EU Member States about role of unconventional fossil fuels (e.g. shale gas) in achieving EU resource efficiency and low carbon economy objectives





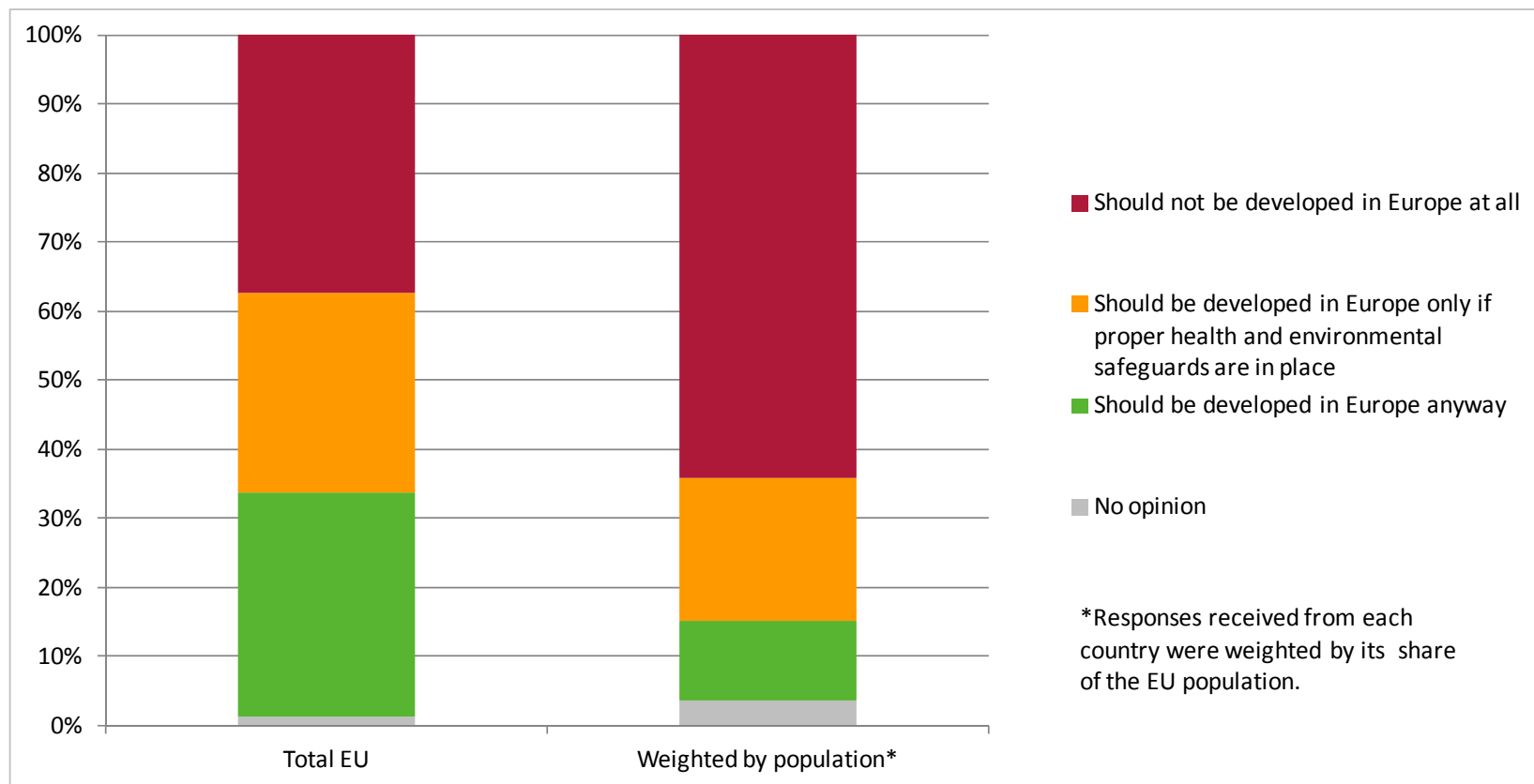
## Opinion of organisations about role of unconventional fossil fuels (e.g. shale gas) in achieving EU resource efficiency and low carbon economy objectives by type of organisation



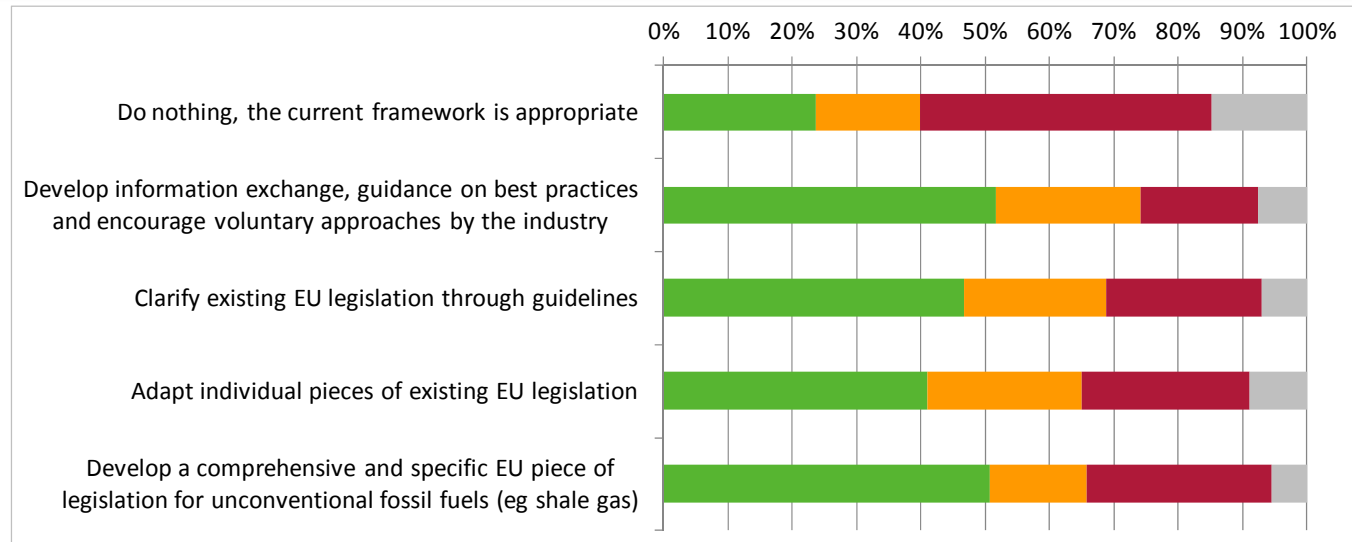
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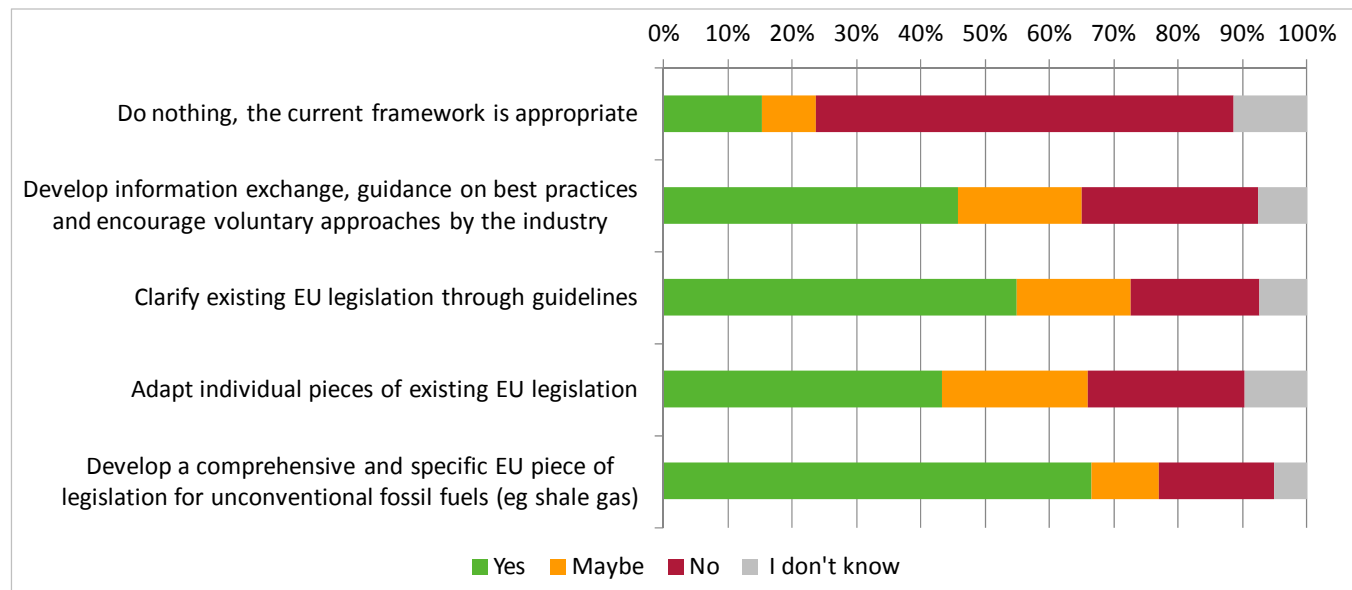
## Opinion of individuals from EU Member States about the development of unconventional fossil fuels (e.g. shale gas) in Europe



### Answers from individual respondents on policy options to address the identified challenges and risks at EU level



### Weighted by population



## Opinion of individual respondents from EU Member States about role of unconventional fossil fuels (e.g. shale gas) in achieving EU resource efficiency and low carbon economy objectives

