

German energy policy – a blueprint for the world?

Key messages

World Energy Council – Germany

Berlin, January 2017

Survey Overview

- Global View – 42 countries
- Europe vs. Rest of the World View – 22 vs. 20 countries
- 2016 participants include World Energy Council's global network of energy experts
- In some cases, 2016 responses are compared to 2015 responses
 - Note: Due to the broadening of participants in our network, 2016 and 2015 results are not directly comparable but are provided for informational purposes.

Executive Summary



► Perception of the Energy Policy and its Goals:

- The majority of respondents believe the German energy policy goals are **feasible, but will be achieved with delay**.
- Most respondents believe the German energy policy would **not serve as a global energy policy blueprint**; however, most respondents believe that **parts of the concept** could be copied.
- **Perception of the energy policy has improved** when compared to 2015 survey results. European countries are less optimistic about whether the energy policy could serve as a global blueprint compared to other countries.
- Approximately one quarter of European respondents stated that the **German energy policy has triggered a national debate on energy** in their country.

► Drivers of Energy Transitions:

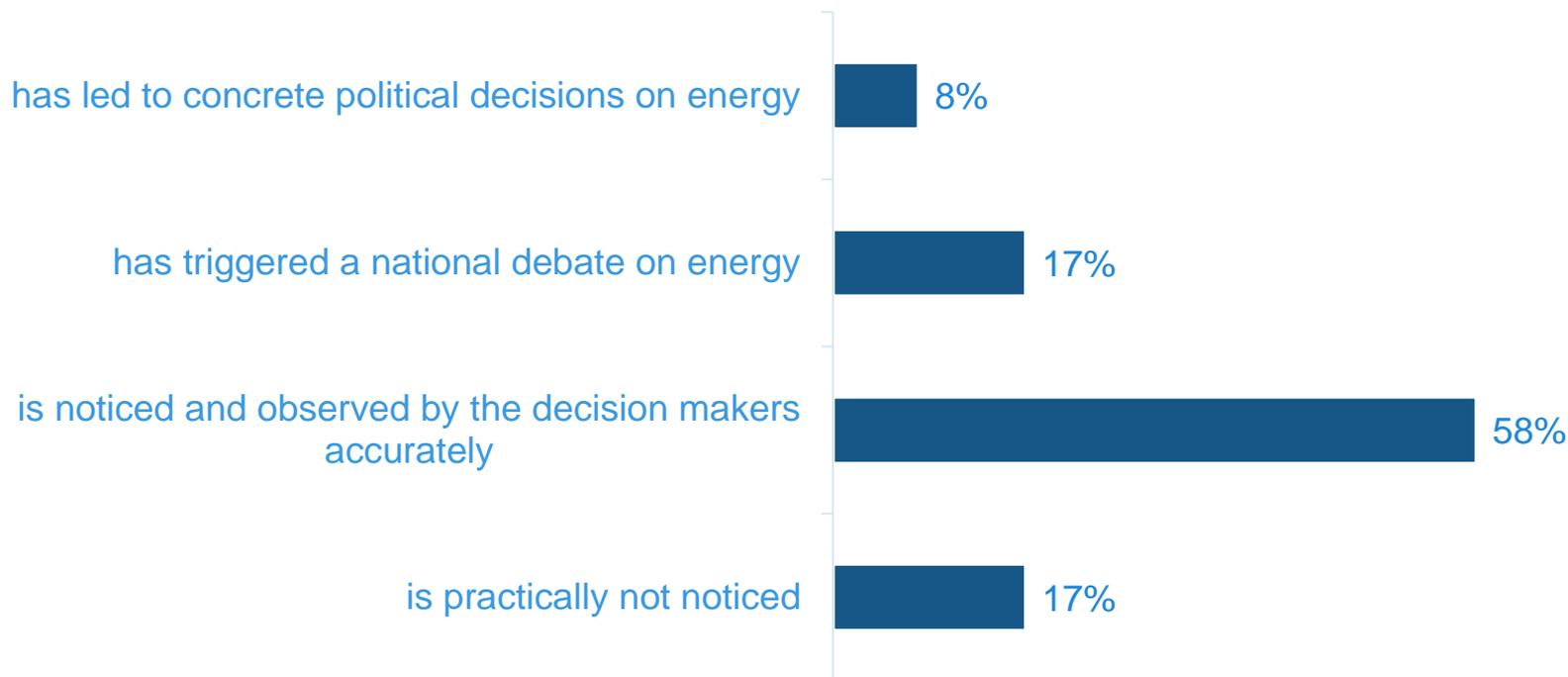
- Europe is different than the rest of the world when it comes to **drivers of energy transitions**: for Europe **climate protection and energy security** are the primary drivers, while for the rest of the world **economic growth and increasing the availability of energy** are the primary drivers.

► Climate Change Strategies and Readiness for an Energy Transition:

- **Energy efficiency measures** and **carbon pricing** are perceived as top strategies in tackling climate change.
- The majority of respondents believe a **CO2 price would increase the readiness for an energy transition** in their country.
- Respondents are even more optimistic about a **CO2 price that is differentiated between G-20 countries and other countries**, versus a CO2 price that is not.

German energy policy is observed world-wide

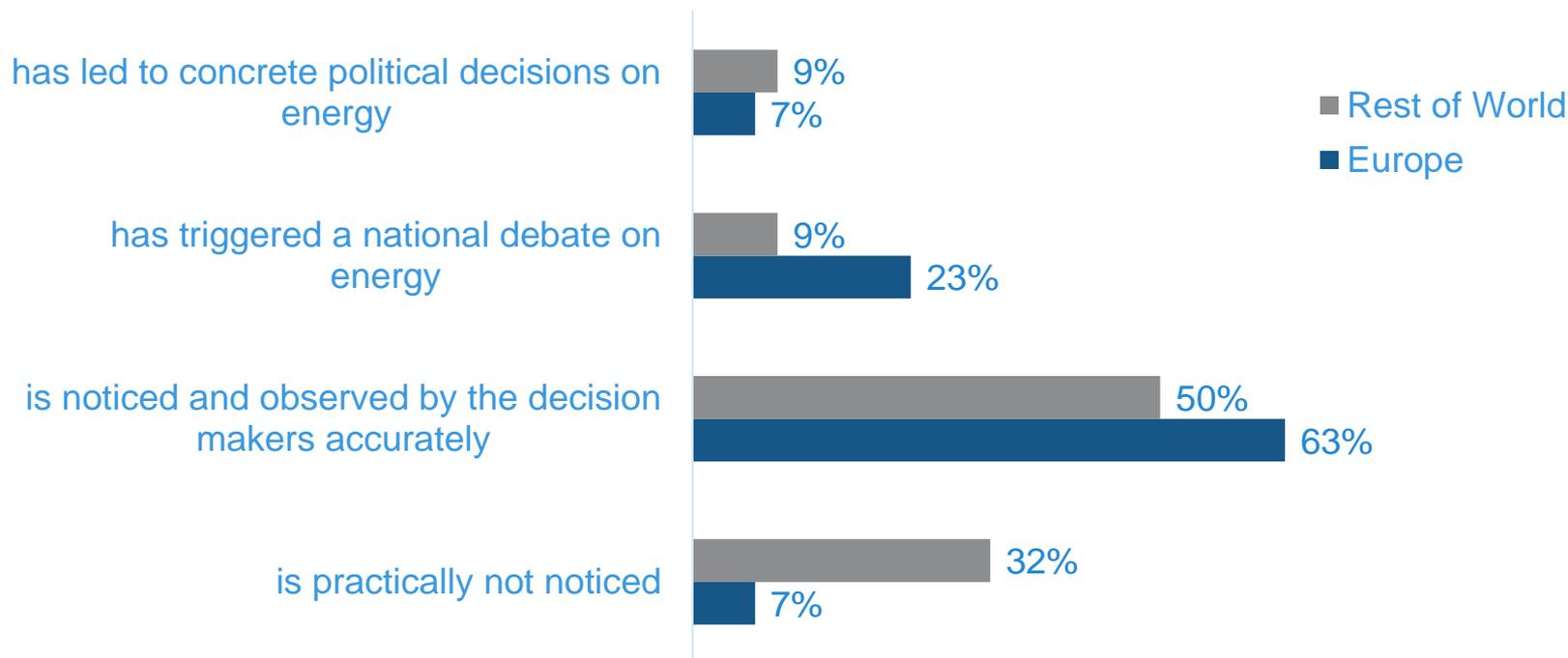
Question 1: How is the current German energy policy perceived in your country?



▶ The German energy policy is noticed widely abroad. For one quarter of respondents, it has either triggered a national debate on energy or led to concrete political decisions on energy.

European respondents are more affected by the German energy transition

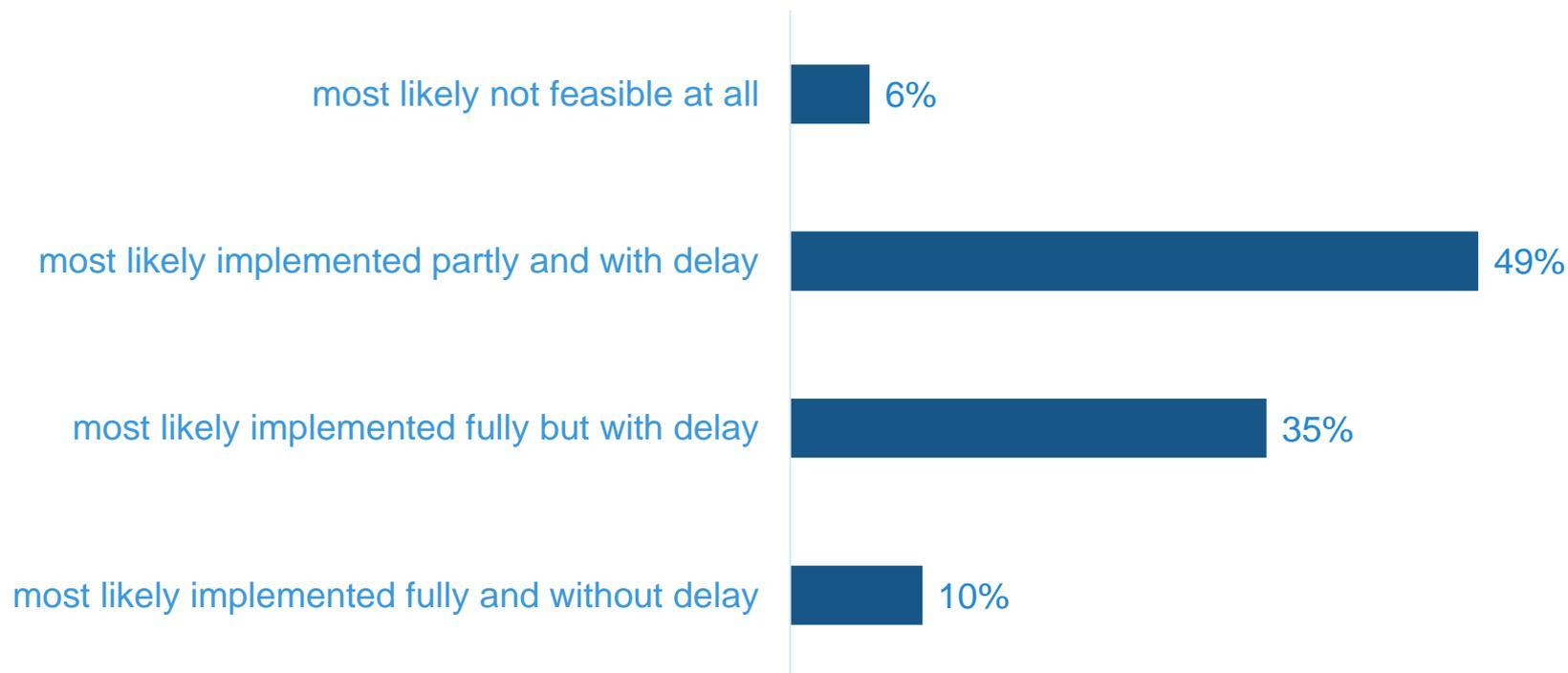
Question 1: How is the current German energy policy perceived in your country?



- **Approximately one quarter of European respondents stated that the German energy policy has triggered a national debate on energy in their country.**
- **In comparison, almost a third of non-European respondents stated the German energy policy was practically not noticed.**

Most respondents believe all or some of the German goals are feasible, but will take time to achieve

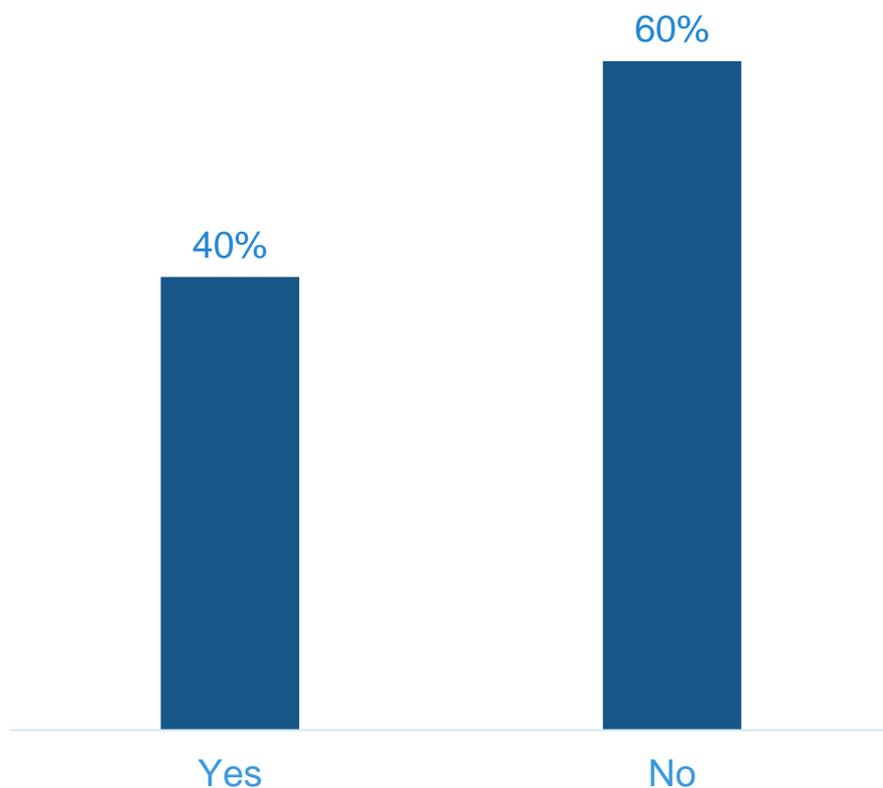
Question 2: How do you assess the feasibility of the German goals?



- **45% of respondents believe all of Germany's goals can be implemented fully, either with or without delay.**
- **84% of respondents believe Germany's goals will either partly or fully be achieved with delay.**

Most believe the German energy policy model is not a blueprint for the world

Question 3: Could the current German energy policy serve as a blueprint for the world?

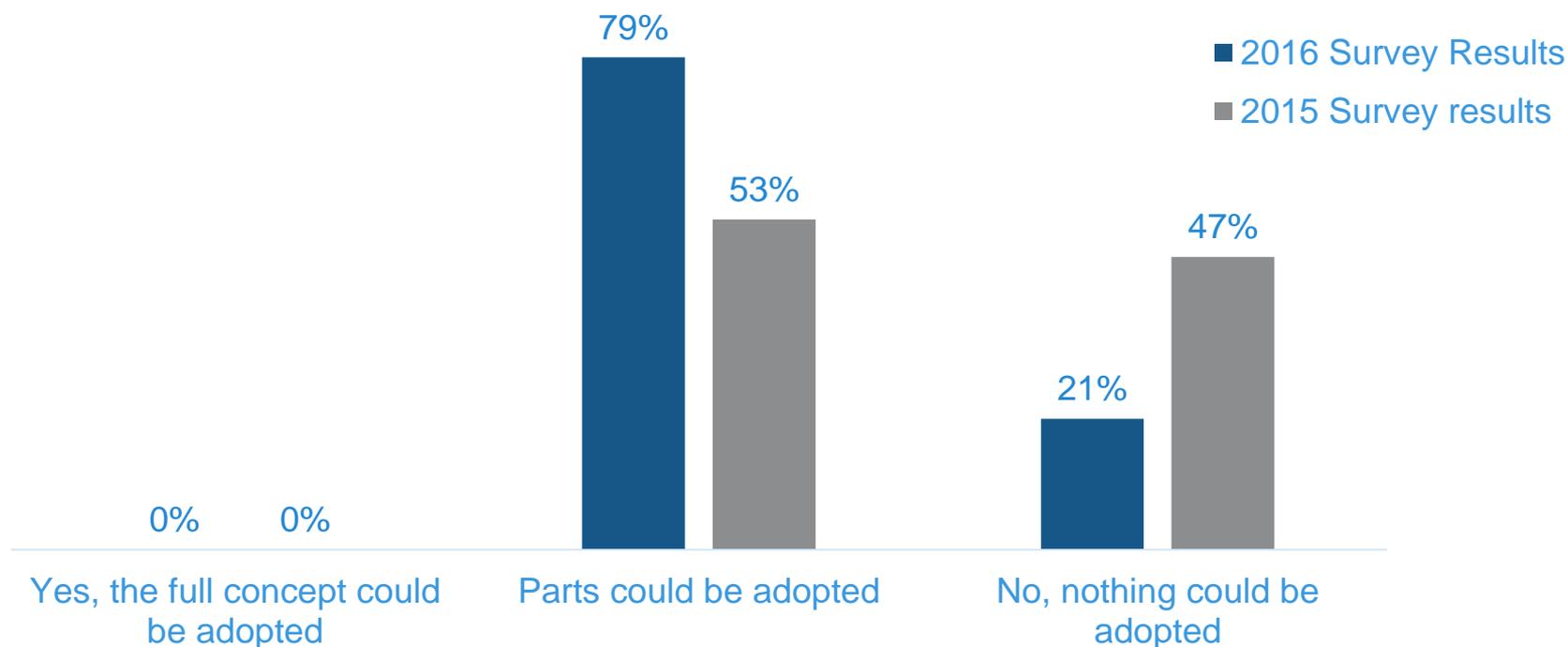


Why? For those that responded 'No,' reasons included:

- **High cost of Germany's energy policy**
- **Lack of integration with neighboring country policies and needs by Germany**
- **Lack of prioritization among goals by Germany**
- **Lack of required technical capacity in other countries**
- **Differences in country energy resources and generation technologies**

The majority of respondents believe that parts of the German energy policy could be adopted in their country

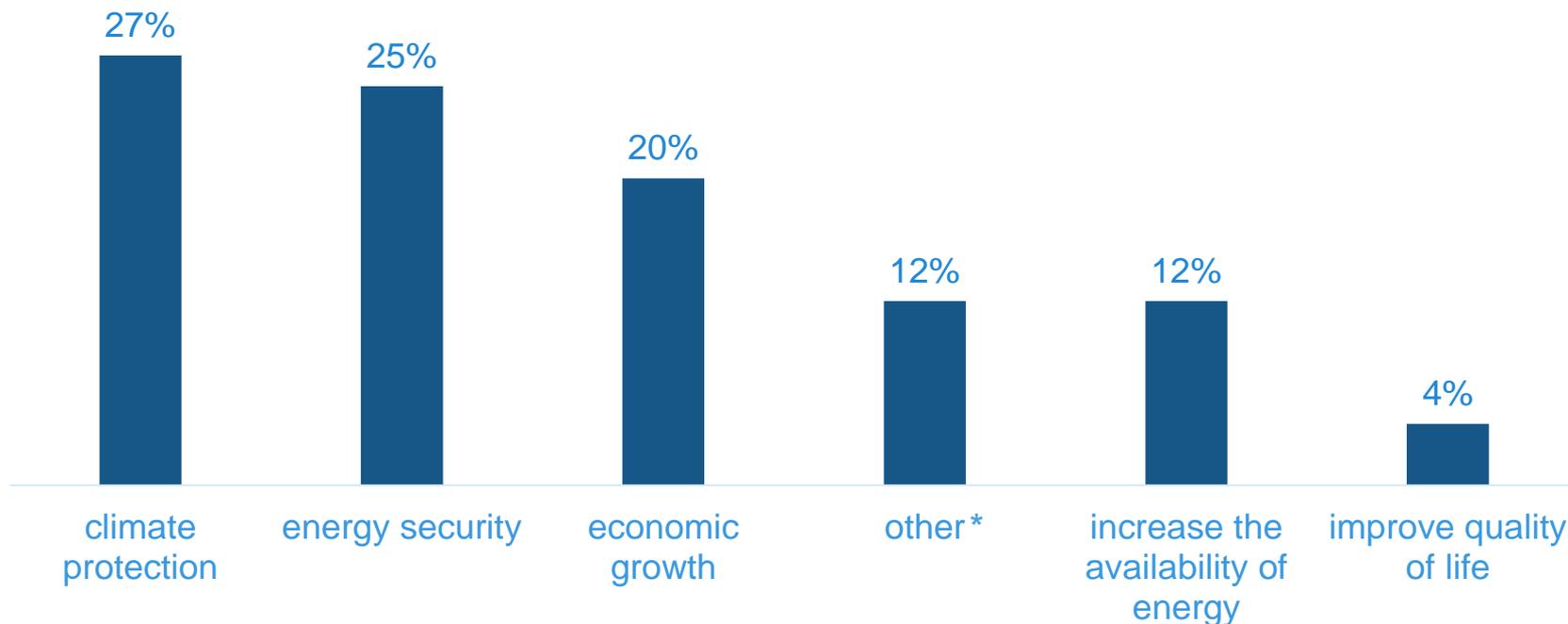
Question 6. Do you expect that your country adopts parts of the German energy policy approach?



No country felt that the full German energy policy concept could be adopted in their country, however the majority of respondents found that parts of the energy policy could be adopted.

Climate protection and energy security are primary drivers of many country energy transitions

Question 10: In your country, what is the main driver for an energy transition?

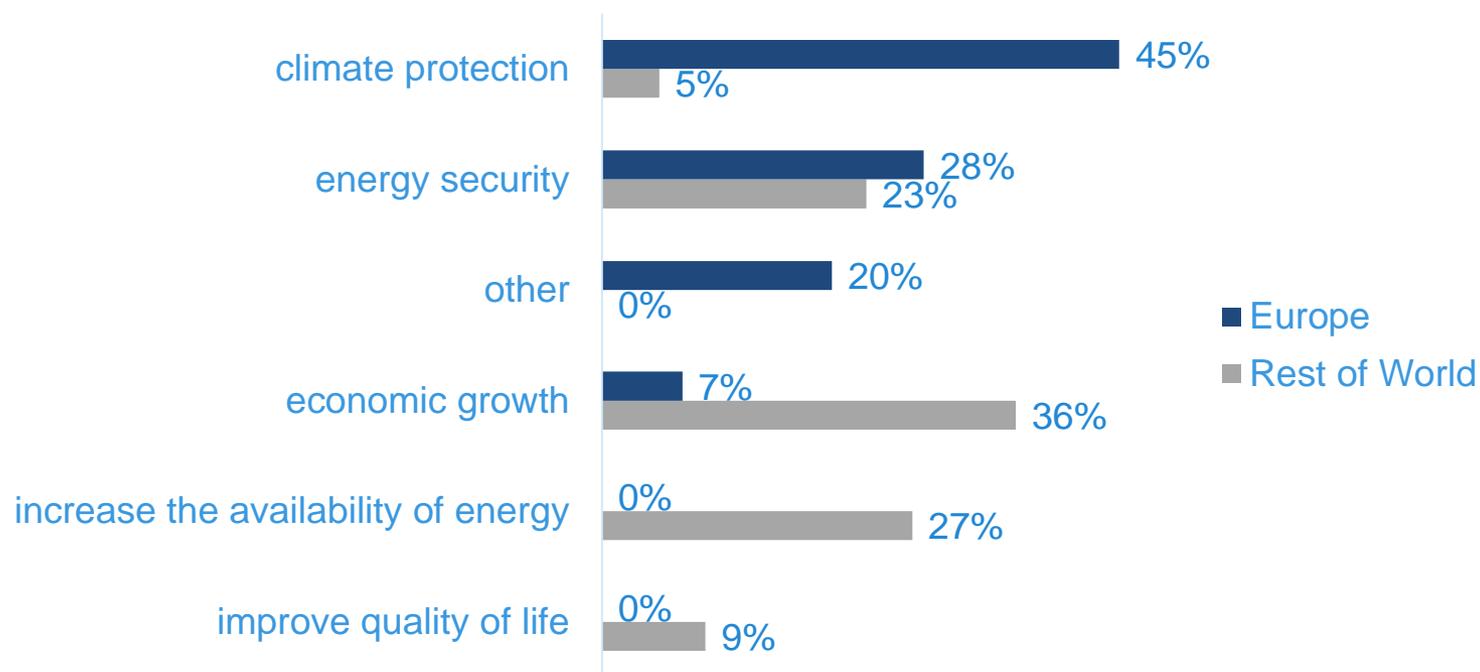


*Other factors driving energy transitions in responder countries included diversification of energy sources, job creation, European policies and the coming end of coal reserves.

▶ Climate protection, energy security and economic growth are the primary drivers of energy transitions world wide.

For European responders climate protection is the primary driver of energy transitions – for Non-Europeans the focus is on economic growth

Question 10: In your country, what is the main driver for an energy transition?



- ▶ **Outside of Europe, very few respondents consider climate protection to be a main driver. Instead, economic growth and increasing the availability of energy are considered the main drivers.**
- **Conversely, the majority of European respondents consider climate protection and energy security to be the main drivers.**

Energy efficiency measures and carbon pricing are perceived as the most effective strategies in tackling climate change

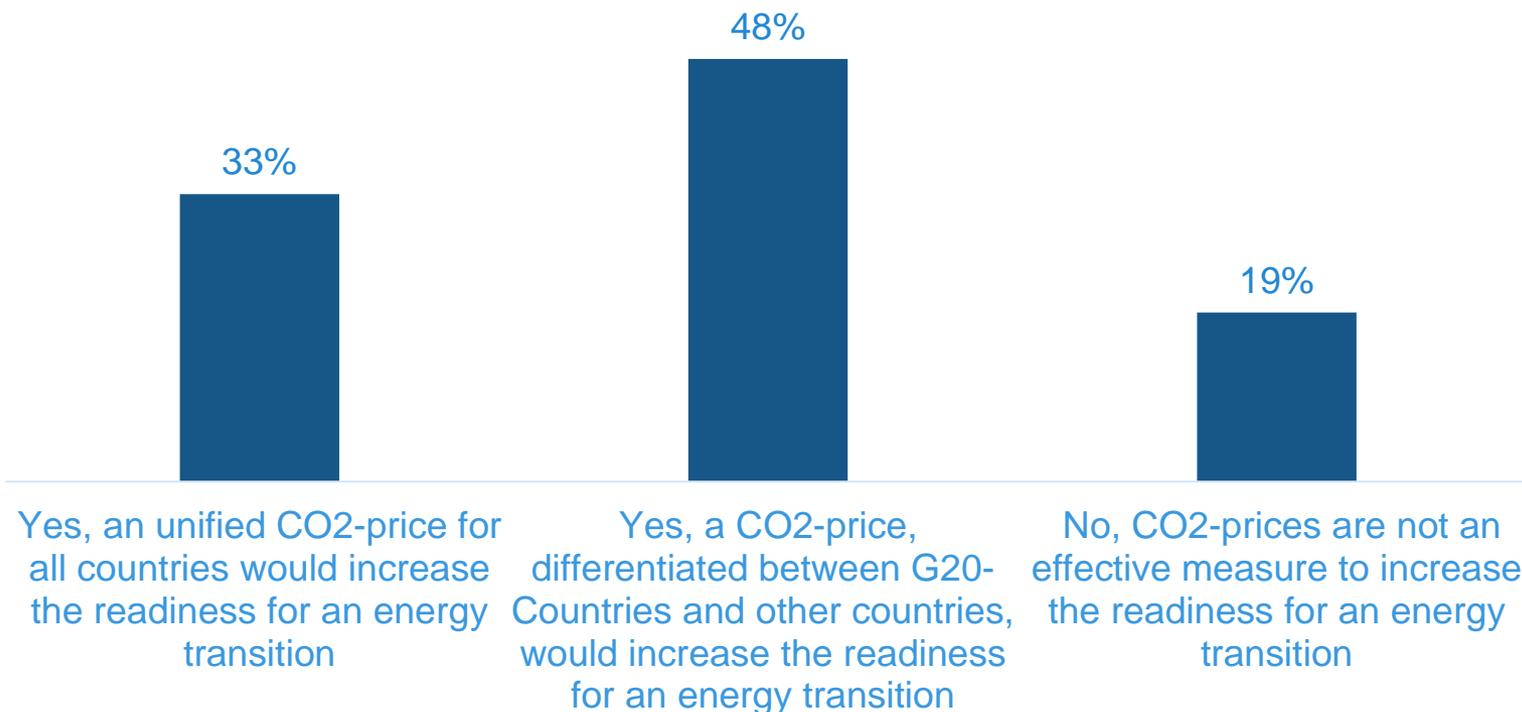
Question 12: How effective do you consider the following measures to tackle climate change?

Measure	Effective	Ineffective	Not sure/don't know
Energy efficiency measures	92%	6%	2%
Cut of subsidies for fossil fuels	77%	12%	11%
Carbon Tax	75%	12%	13%
Phase-out of coal	73%	14%	13%
Use of gas instead of other fossil fuels	69%	17%	14%
Electrification (heating/cooling, mobility)	67%	10%	23%
Emission Trading System	56%	27%	17%
Subsidies for renewables	52%	42%	6%
Financial support for CCS/CCU	47%	29%	24%
Phase-out of all fossil fuels	42%	35%	23%
Use of hydrogen	38%	21%	41%
Subsidies for nuclear power	37%	38%	25%
Power to gas/chemistry/fuels	29%	21%	50%

 There is broad consensus that energy efficiency measures are the most effective strategy for tackling climate change.

Over 80% of respondents believe a CO2 price would increase the readiness for an energy transition in their country

Question 13: Do you think a CO2-price, creating a global level playing field, would increase the readiness in your country to adopt an energy transition similar to the German Energiewende?



- The majority of respondents believes a CO2 price would increase the readiness for an energy transition in their country.
- Respondents are even more optimistic about a CO2 price that is differentiated between G-20 countries and other countries, versus a CO2 price that is not.

Overview of Responding Countries

European countries

- ▶ Austria
- ▶ Belgium
- ▶ Bulgaria
- ▶ Czech Republic
- ▶ Denmark
- ▶ Estonia
- ▶ Finland
- ▶ France
- ▶ Belgium
- ▶ Hungary
- ▶ Italy
- ▶ Latvia
- ▶ Lithuania
- ▶ Monaco
- ▶ Netherlands
- ▶ Norway
- ▶ Poland
- ▶ Portugal
- ▶ Serbia
- ▶ Sweden
- ▶ Switzerland
- ▶ Turkey

Countries outside of Europe

- ▶ Algeria
- ▶ Argentina
- ▶ Armenia Republic
- ▶ Botswana
- ▶ Cameroon
- ▶ Colombia
- ▶ Ecuador
- ▶ Ghana
- ▶ Hong Kong
- ▶ Japan
- ▶ Kazakstan
- ▶ Mexico
- ▶ South Africa
- ▶ Swaziland
- ▶ Thailand
- ▶ Trinidad and Tobago
- ▶ Iran
- ▶ Dubai UAE
- ▶ Canada
- ▶ USA