



## **Flash Eurobarometer 360**

# **ATTITUDES OF EUROPEANS TOWARDS AIR QUALITY**

## **SUMMARY**

Fieldwork: September 2012

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This survey has been requested by the European Commission, Directorate-General for the Environment and co-ordinated by Directorate-General for Communication.

This document does not represent the point of view of the European Commission.  
The interpretations and opinions contained in it are solely those of the authors.

**Flash Eurobarometer 360**

**Attitudes of Europeans towards  
air quality**

Conducted by TNS Political & Social at the request of  
the European Commission,  
Directorate-General for the Environment

Survey co-ordinated by the European Commission,  
Directorate-General for Communication  
(DG COMM "Research and Speechwriting" Unit)

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## INTRODUCTION

The questions in this Flash Eurobarometer are designed to provide greater insight into the views of the European public on matters of air quality and air pollution. Specifically the survey was designed to examine:

- ◆ the level of knowledge about air quality problems;
- ◆ the perceived seriousness of air-related problems and perceived changes in the quality of air over the past ten years;
- ◆ the perceived impact of various sectors and activities on air quality;
- ◆ the main threats to air quality;
- ◆ environmentally friendly energy options;
- ◆ individual and other actions to reduce air-related problems;
- ◆ measures the EU should take;
- ◆ the impact of energy production and use on air quality with a focus on unconventional fossil fuels.

In the course of this survey, 25,525 European citizens aged 15 and above were interviewed by telephone (fixed-line and mobile phone) by the TNS Political & Social network between 24 and 26 September 2012 in all 27 European Union Member States, at the request of the European Commission's Directorate-General for the Environment. The methodology used is that of surveys as carried out by the Directorate General for Communication ("Research and Speechwriting" Unit)<sup>1</sup>. A technical note on the methodology for interviews conducted by the institutes within the TNS Political & Social network is annexed to this report. This note indicates the interview methods and the confidence intervals<sup>2</sup>.

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<sup>1</sup> [http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm)

<sup>2</sup> The results tables are included in the annex. It should be noted that the total of the percentages in the tables of this report may exceed 100% when the respondent can give several answers to the same question.

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*The Eurobarometer web site can be consulted at the following address:*

*[http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm)*

*We would like to take the opportunity to thank all the respondents across the EU who gave their time to take part in this survey.*

*Without their active participation, this study would not have been possible.*

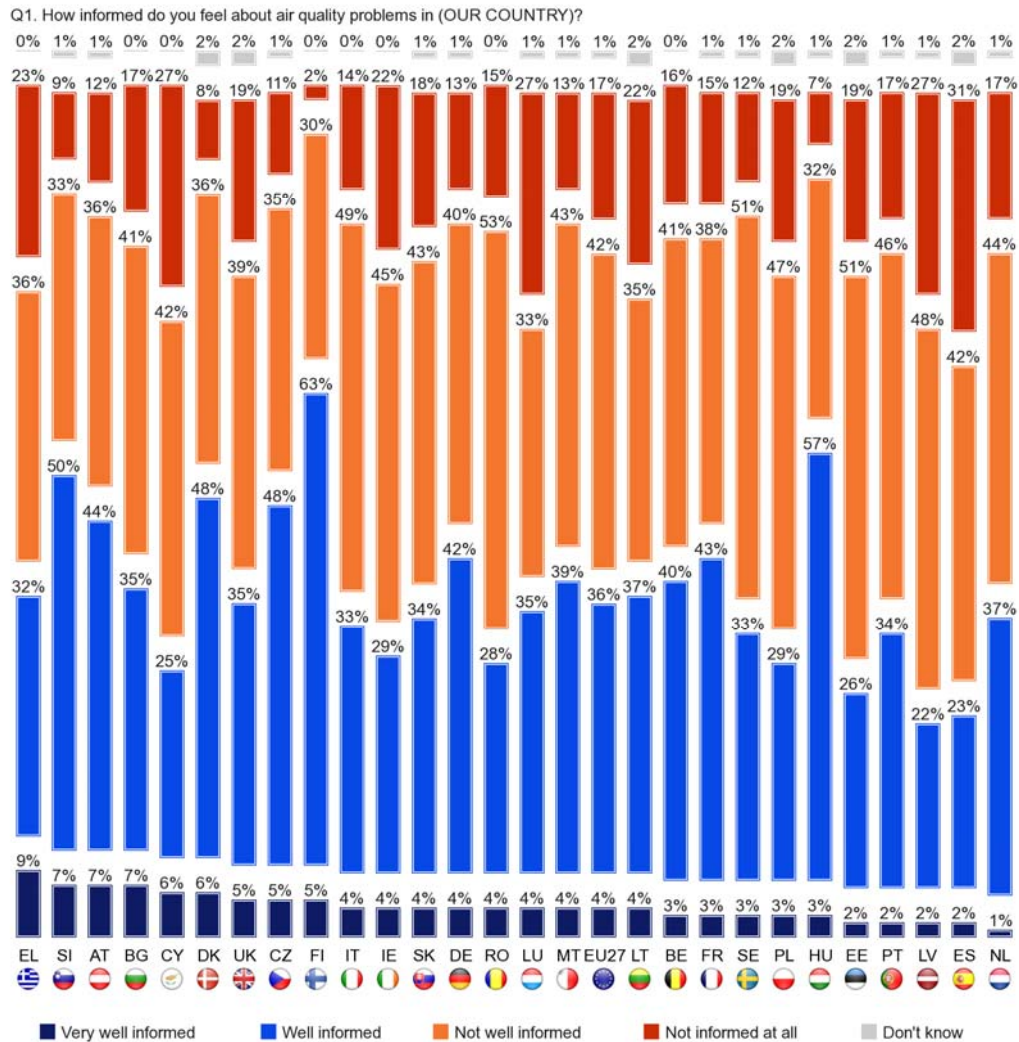
#### Note

##### ABREVIATIONS

EU27	European Union - 27 Member States
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Republic of Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	The Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

## 1. LEVEL OF INFORMATION ABOUT AIR QUALITY PROBLEMS

Six out of ten Europeans do not feel informed about air quality issues in their country.



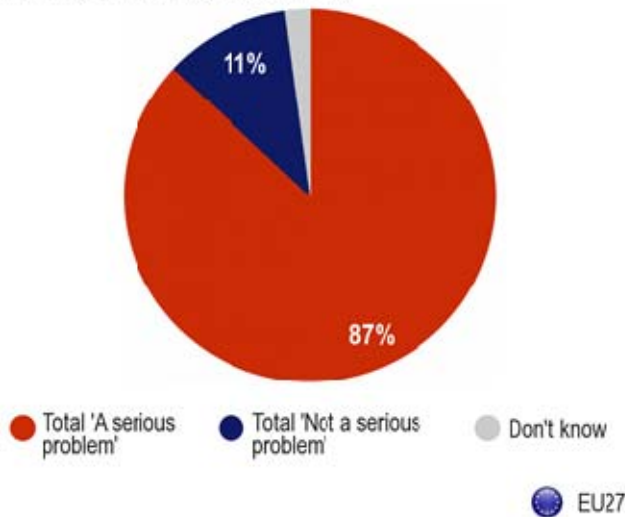
Almost seven out of ten respondents in Finland (68%) say that they are informed to some degree about air quality problems in their country. This is the highest level across the EU. Respondents in Hungary (60%), Slovenia (57%), Denmark (54%), The Czech Republic (53%) and Austria (51%) are also more likely than the European average to say they feel informed about air quality problems.

In four countries at least one quarter of respondents say that they are not informed at all about air quality problems: Spain (31%), Luxembourg, Cyprus and Latvia (27%).

## 2. SERIOUSNESS OF AIR-RELATED PROBLEMS

Q3.1. Would you say that the following is a very serious problem, a fairly serious problem, not a very serious problem or not a serious problem at all in (OUR COUNTRY)?

Respiratory diseases (e.g. lung diseases)



each country saying these are a serious problem.

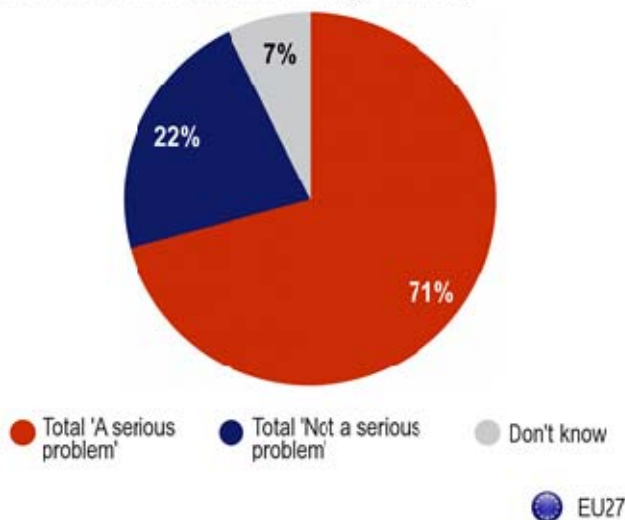
87% think respiratory diseases are a serious problem, with at least six out of ten respondents in every country think that respiratory diseases are a serious problem.

More than nine in ten (92%) Europeans consider cardiovascular diseases to be a serious problem in their country, and at least eight out of ten respondents in each country think this way.

87% of Europeans think asthma and allergy are a serious problem, with the majority of respondents in

Q3.4. Would you say that the following is a very serious problem, a fairly serious problem, not a very serious problem or not a serious problem at all in (OUR COUNTRY)?

Acidification (known as acid rain, affecting forests etc.)



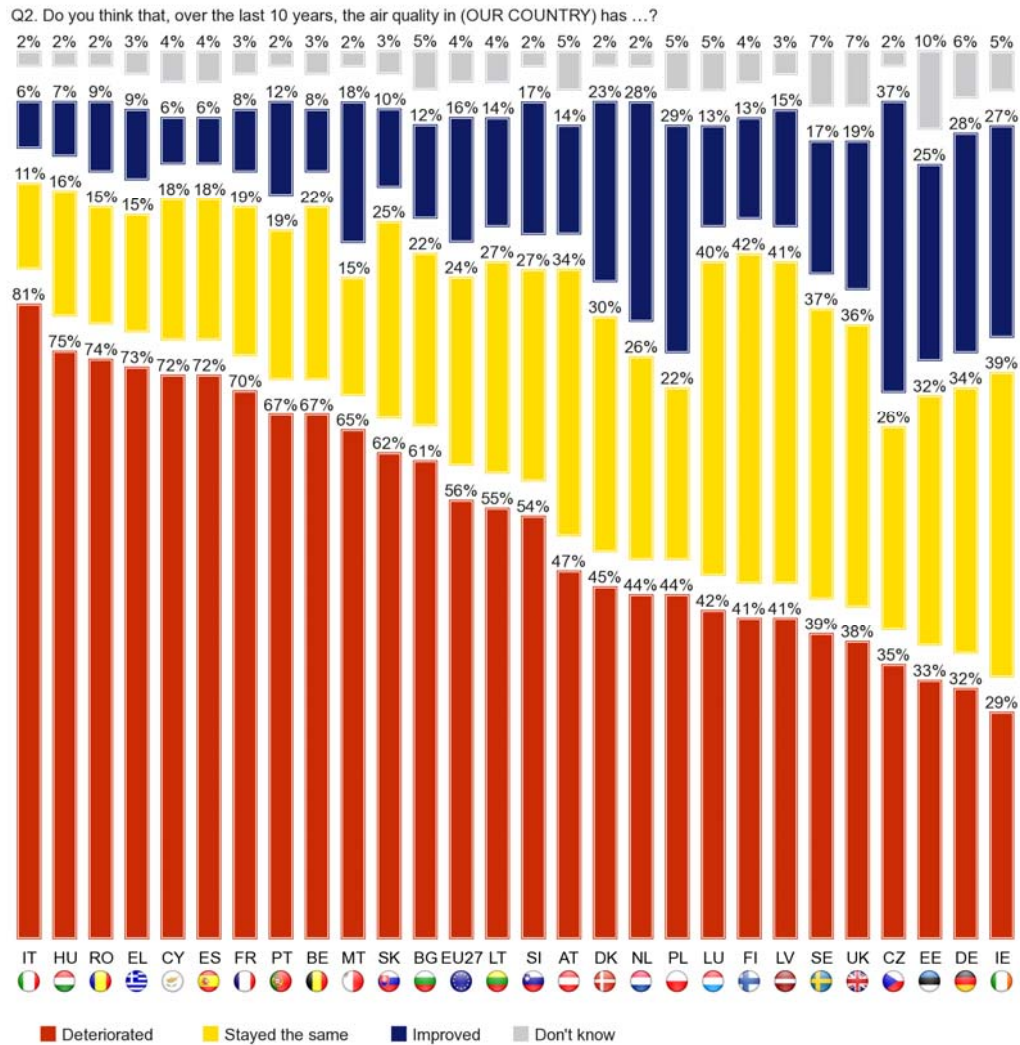
More than seven out of ten Europeans think acidification is a serious problem (71%), although there is a much greater diversity of opinion across Europe on the seriousness of acidification.

More than three quarters (78%) of Europeans think eutrophication is a serious problem, with the majority of respondents in all but one country saying this.

Analysis highlights that a respondent who considers one of these issue to be a serious problem is more likely to think that each of the others are also serious.

### 3. CHANGES IN THE AIR QUALITY OVER THE LAST 10 YEARS

56% of Europeans think air quality has deteriorated in the last 10 years, and 16% say it has improved.



Respondents in the Czech Republic are the most positive about air quality in the past ten years, with 37% saying that it has improved. At least one quarter of respondents in Poland (29%), the Netherlands, Germany (both 28%), Ireland (27%) and Estonia (25%) also think that air quality in their country has improved in the past 10 years.

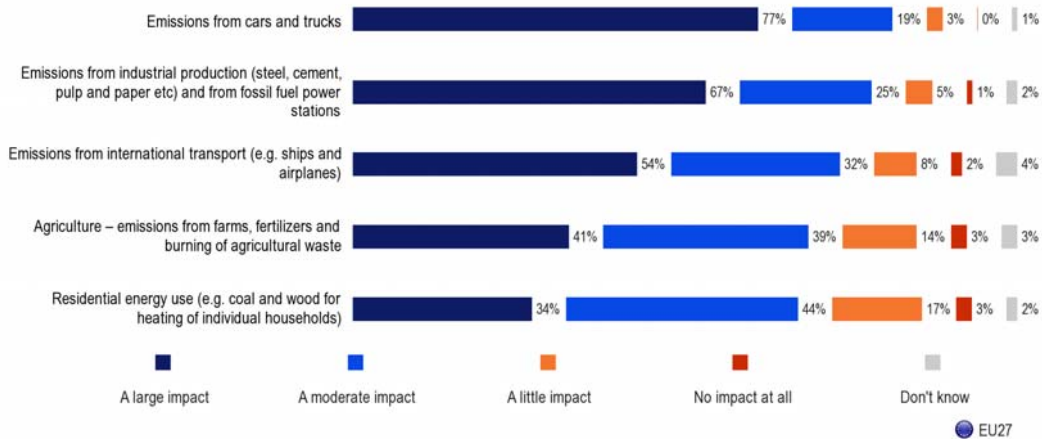
In contrast, 81% of Italian respondents think that air quality in their country has deteriorated. At least seven out of ten respondents in Hungary (75%), Romania (74%), Greece (73%), Spain, Cyprus (both 72%) and France (70%) also think that air quality has deteriorated.



## 4. IMPACT OF VARIOUS FACTORS ON AIR QUALITY

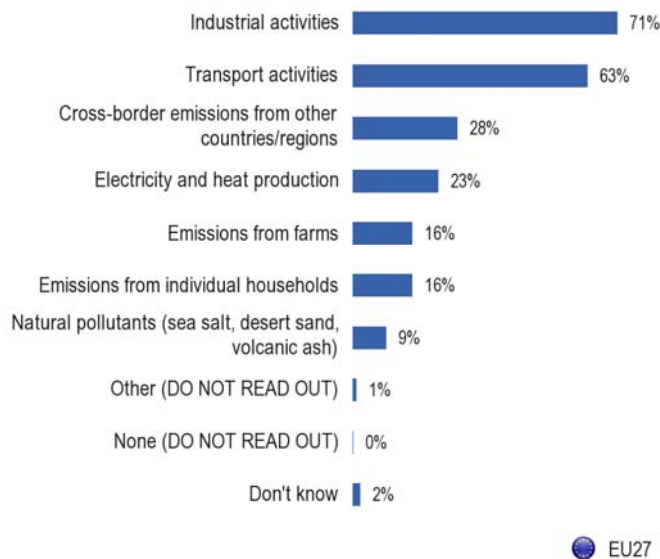
Vehicle emissions (96%) and emissions from industrial production (92%) are seen as having the biggest impact on air quality.

Q4. How much impact do you think each of the following has on air quality in (OUR COUNTRY)? Does it have a large impact, a moderate impact, a little impact or no impact at all?



## 5. MAIN THREATS TO AIR QUALITY

Q5. Which of the following do you believe are the main threats to air quality in (OUR COUNTRY)?



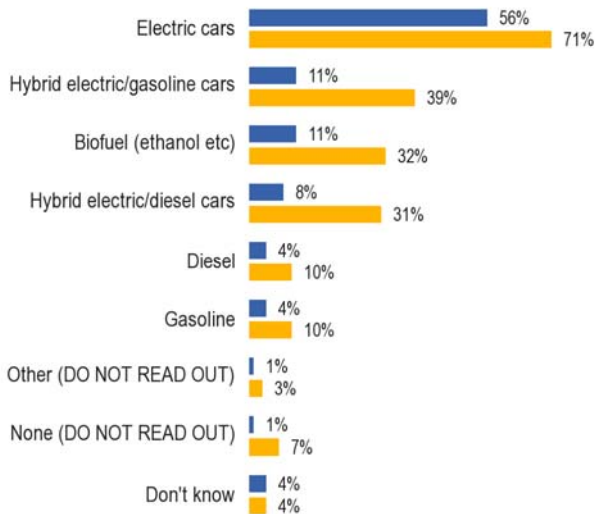
Industrial activities (71%) and transport activities (63%) are viewed as the main threats to air quality. **Industrial activities** and **transport activities** are the most mentioned threats to air quality at an individual country level. **Industrial activities** are the most mentioned threat to air quality by respondents in 18 countries, with respondents in France the most likely to do so across the EU (82%). Eight out of ten respondents in Italy, Spain and Portugal also mention industrial activities (all 80%). In contrast, fewer than

half of all Danish respondents mention industrial activities. In fact Denmark is the only country where fewer than half of respondents mention industrial activities as a threat to air quality.

## 6. MOST ENVIRONMENTALLY FRIENDLY ENERGY SYSTEMS

Electric cars (71%) are considered the most environmentally friendly in terms of air quality, hybrid electric/gasoline cars rank second (39%).

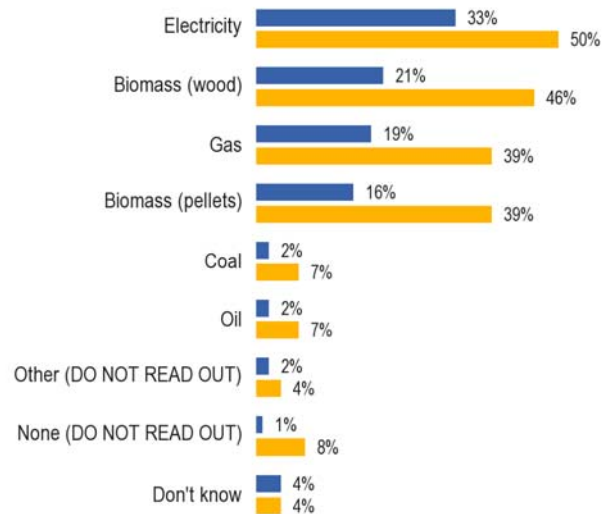
Q6. Which of the following car fuel systems do you consider the most environmentally friendly from an air quality perspective?



■ Firstly  
■ In total

● EU27

Q7. Which of the following energy systems for heating of households do you consider the most environmentally friendly from an air quality perspective?



■ Firstly  
■ In total

● EU27

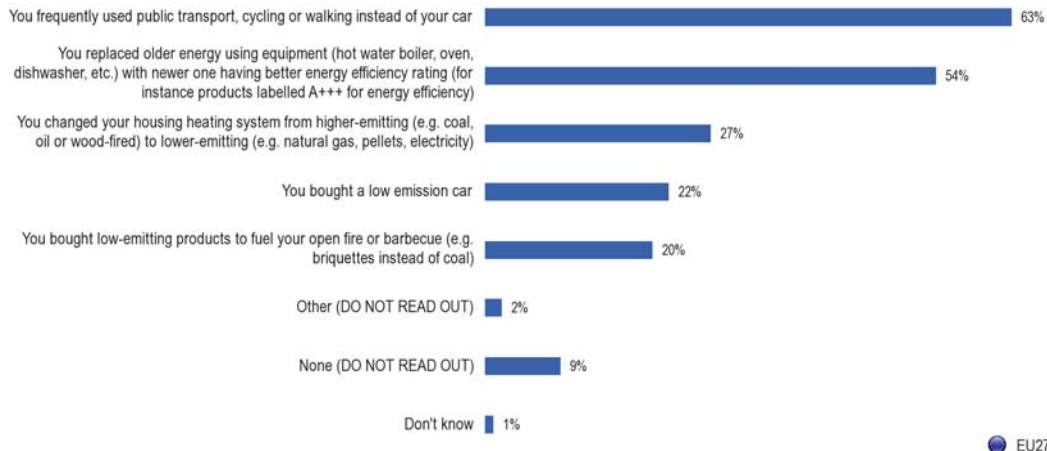
Electric cars are considered to be the most environmentally friendly fuel system in terms of air quality by the majority of respondents in every country, and this is the also most mentioned system in all 27 countries.

Electricity is considered the most environmentally friendly household heating system in terms of air quality (50%) followed by wood (46%), gas and biomass in the form of pellets (both 39%).

## 7. TAKING INDIVIDUAL ACTIONS TO REDUCE HARMFUL EMISSIONS TO AIR

Reducing car use (63%) and upgrading to more energy efficient appliances (54%) are the most commonly taken individual actions to reduce emissions.

Q8. There are different ways to reduce harmful emissions to air. In order to reduce these problems have you done any of the following in the last two years?

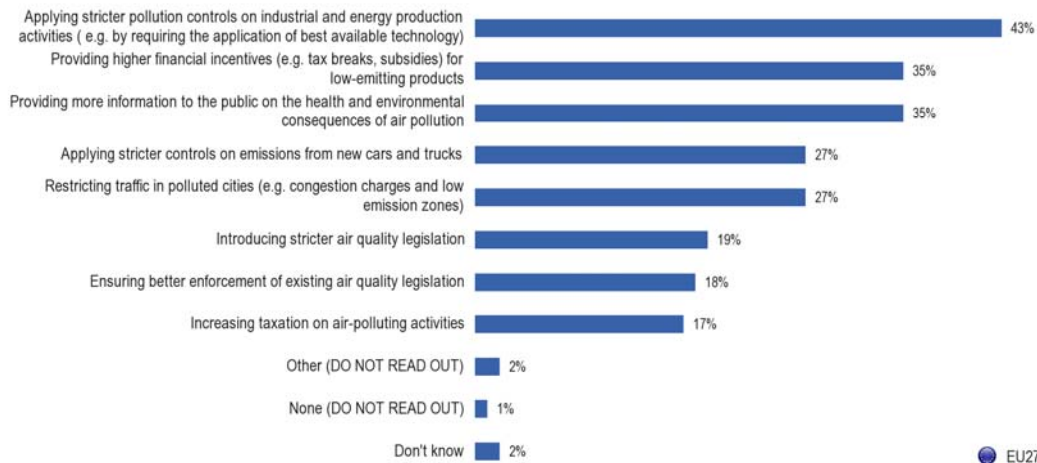


(MULTIPLE ANSWERS POSSIBLE)

## 8. TACKLING AIR-RELATED PROBLEMS

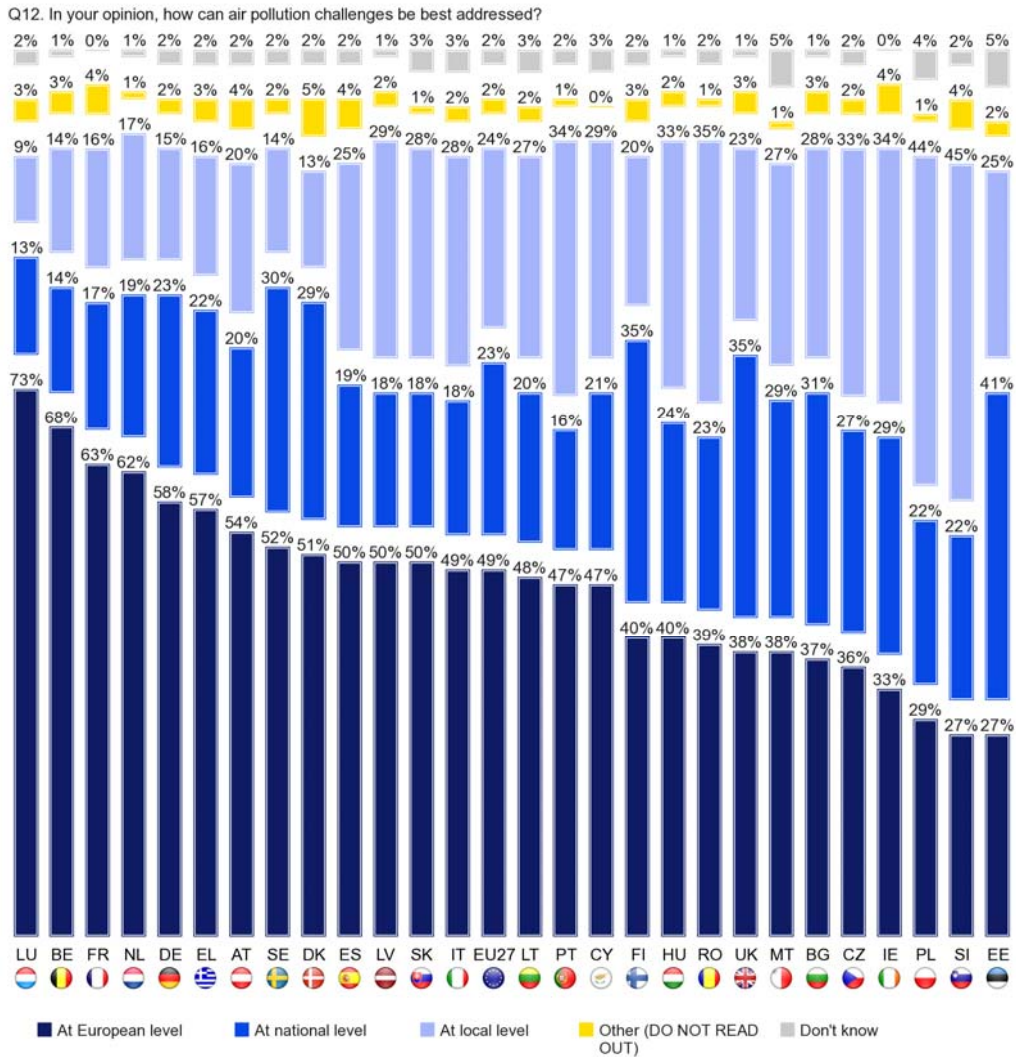
Stricter pollution controls on industrial activity and energy production are seen as the most effective way to tackle air-related problems (43%).

Q9. In your opinion, which of the following would be the most effective ways of tackling air-related problems?



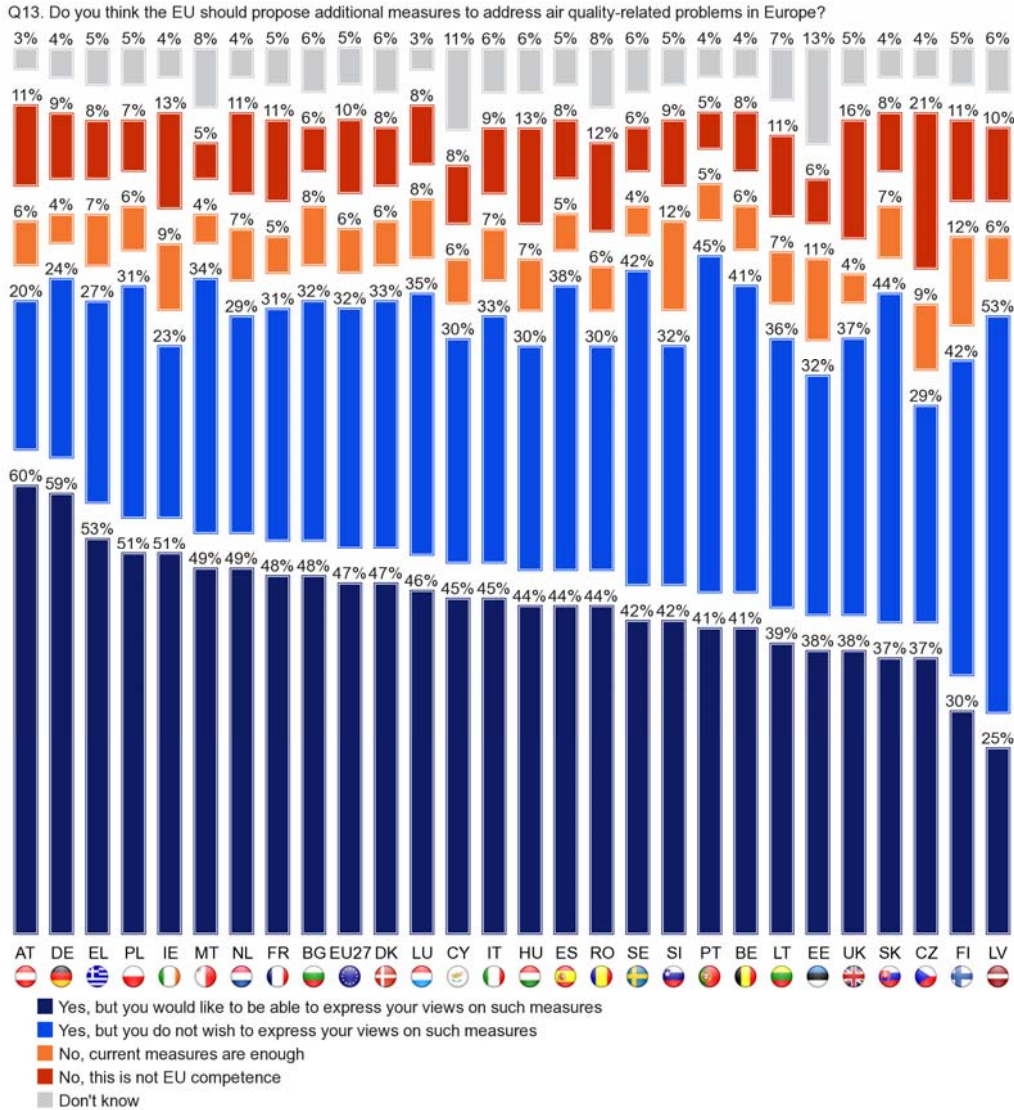
(MAX. 3 ANSWERS)

49% of Europeans think that the challenges of air pollution can best be addressed at the European level. Around one quarter think these challenges are better addressed at the national level (23%), or at the local level (24%).



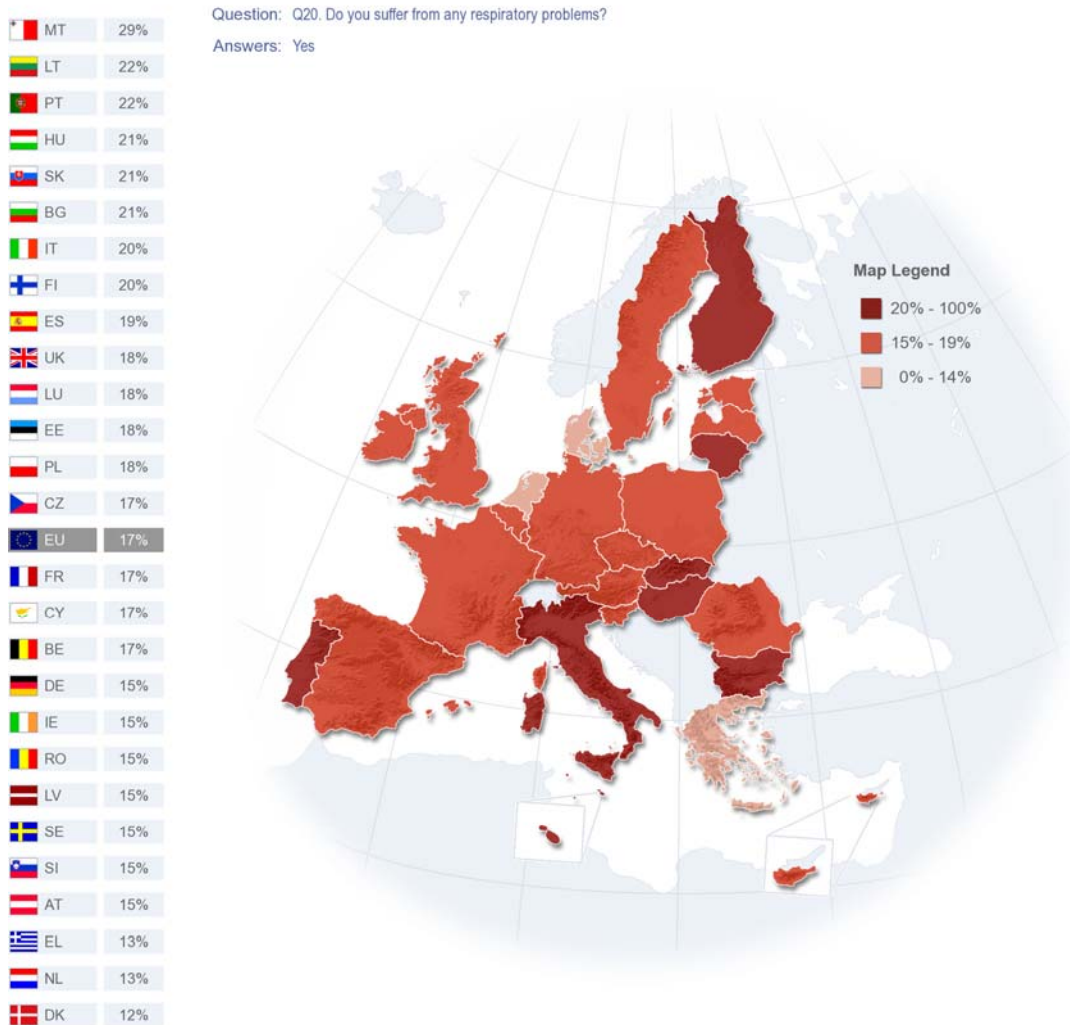
### 9. THE EU ROLE IN TACKLING AIR-RELATED PROBLEMS

Most Europeans (79%) think that the EU should propose additional measures to address air quality-related problems in Europe. 47% think there should be additional measures and would like to be able to express their views on them, while 32% think there should be additional measures but do not wish to express their views on such measures.



## 10. INDIVIDUAL RESPIRATORY PROBLEMS IN THE EU

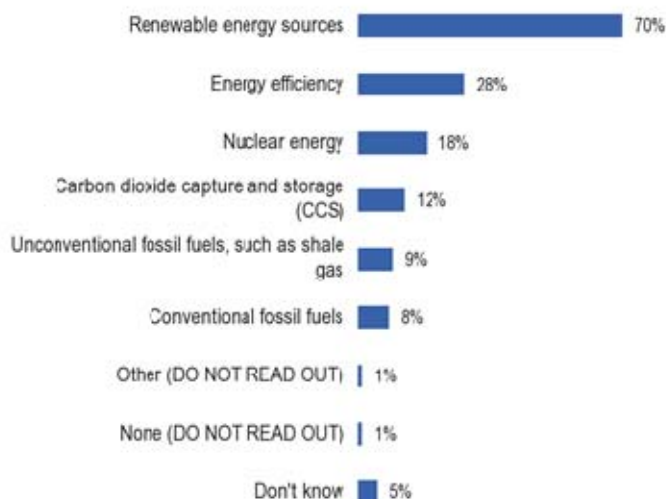
Respondents in Malta are the most likely to say that they suffer from respiratory problems (29%), while those in Denmark (12%), the Netherlands and Greece (both 13%) are the least likely to say this.



Socio-demographic analysis reveals few differences. Respondents aged 55+ are the most likely to say they suffer from respiratory problems, particularly compared to 15-39 year olds (20% vs. 15%). Non-workers are the most likely to say they suffer from respiratory problems, particularly compared to employees (20% vs. 14%).

## 11. IMPACT OF ENERGY PRODUCTION AND USE ON AIR QUALITY

Q21. Thinking about the next 30 years, which of the following energy options do you think should be prioritised now in (OUR COUNTRY)?



Thinking about the next 30 years, fewer than one in ten Europeans think that unconventional fossil fuels should be prioritised.

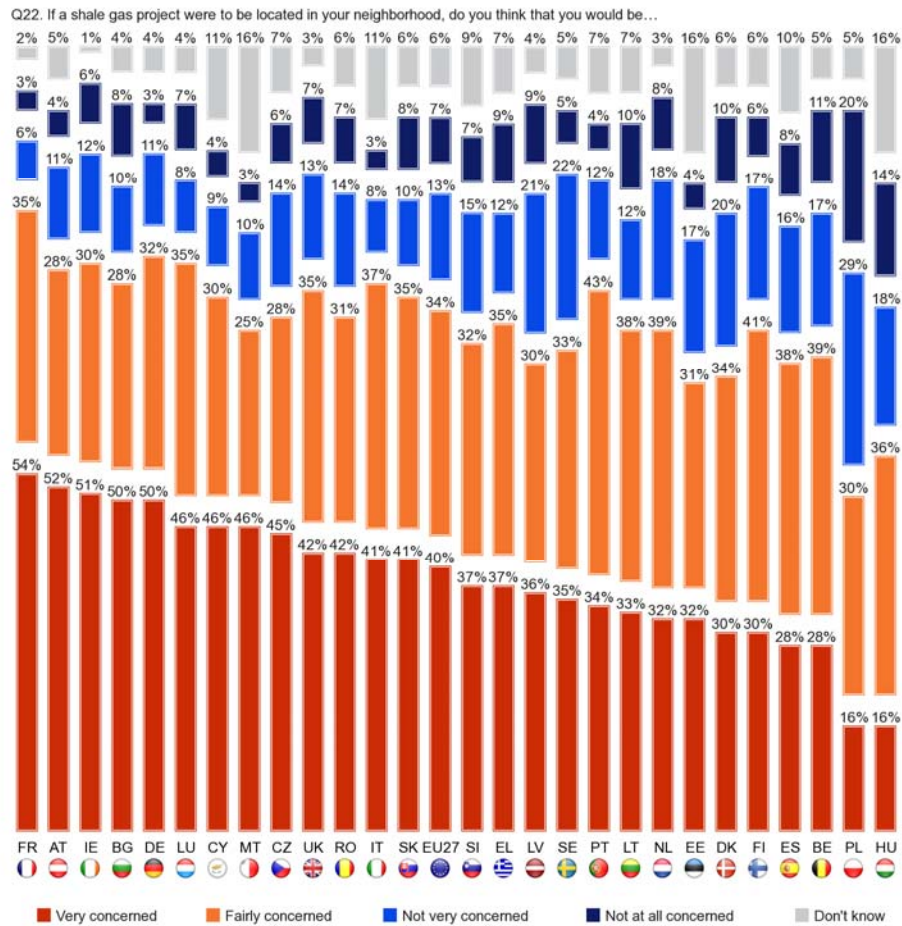
Seven out of ten (70%) Europeans think renewable energy sources should be the priority energy option, with energy efficiency a distant second (28%). In all 27 countries, renewable energy is the most mentioned priority for energy options in the next 30 years.

EU27

(MAX. 2 ANSWERS)



74% of respondents would be concerned if there was a shale gas project located in their neighbourhood, with 40% being very concerned.



Respondents living in France (89%), Germany (82%), Ireland, Luxembourg (both 81%) and Austria (80%) are the most likely to be concerned by a shale gas project in their neighbourhood. In fact at least half of all respondents in France (54%), Austria (52%) Ireland (51%) Germany and Bulgaria (both 50%) say they would be very concerned if a shale gas project was located in their neighbourhood.

More than six respondents out of ten agree there should be harmonised and consistent approaches in the EU to manage unconventional fossil fuels extraction such as shale gas (61%), with a majority of respondents in 26 countries agreeing. Austria is the only country where the majority disagree that harmonised and consistent approaches should be developed (61%).



## **TECHNICAL SPECIFICATIONS**

## FLASH EUROBAROMETER 360

### "Attitudes of Europeans towards Air Quality"

#### TECHNICAL SPECIFICATIONS

Between the 24<sup>th</sup> and the 28<sup>th</sup> of September 2012, TNS Political & Social, a consortium created between TNS political & social, TNS UK and TNS opinion, carried out the survey FLASH EUROBAROMETER 360 about "Attitudes of Europeans towards Air Quality".

This survey has been requested by the EUROPEAN COMMISSION, Directorate-General for Environment. It is a general public survey co-ordinated by the Directorate-General for Communication ("Research and Speechwriting" Unit). The FLASH EUROBAROMETER 360 covers the population of the respective nationalities of the European Union Member States, resident in each of the 27 Member States and aged 15 years and over. All interviews were carried using the TNS e-Call center (our centralized CATI system). In every country respondents were called both on fixed lines and mobile phones. The basic sample design applied in all states is multi-stage random (probability). In each household, the respondent was drawn at random following the "last birthday rule".

TNS has developed its own RDD sample generation capabilities based on using contact telephone numbers from responders to random probability or random location face to face surveys, such as Eurobarometer, as seed numbers. The approach works because the seed number identifies a working block of telephone numbers and reduces the volume of numbers generated that will be ineffective. The seed numbers are stratified by NUTS2 region and urbanisation to approximate a geographically representative sample. From each seed number the required sample of numbers are generated by randomly replacing the last two digits. The sample is then screened against business databases in order to exclude as many of these numbers as possible before going into field. This approach is consistent across all countries.

For each country a comparison between the sample and the universe was carried out. The Universe description was derived from Eurostat population data or from national statistics offices. For all countries surveyed, a national weighting procedure, using marginal and intercellular weighting, was carried out based on this Universe description. In all countries, gender, age, region and size of locality were introduced in the iteration procedure. For international weighting (i.e. EU averages), TNS Political & Social applies the official population figures as provided by EUROSTAT or national statistic offices. The total population figures for input in this post-weighting procedure are listed above.

Readers are reminded that survey results are estimations, the accuracy of which, everything being equal, rests upon the sample size and upon the observed percentage. With samples of about 1,000 interviews, the real percentages vary within the following confidence limits:

Statistical Margins due to the sampling process (at the 95% level of confidence)											
<i>various sample sizes are in rows</i>						<i>various observed results are in columns</i>					
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	
	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	
N=50	6,0	8,3	9,9	11,1	12,0	12,7	13,2	13,6	13,8	13,9	N=50
N=500	1,9	2,6	3,1	3,5	3,8	4,0	4,2	4,3	4,4	4,4	N=500
N=1000	1,4	1,9	2,2	2,5	2,7	2,8	3,0	3,0	3,1	3,1	N=1000
N=1500	1,1	1,5	1,8	2,0	2,2	2,3	2,4	2,5	2,5	2,5	N=1500
N=2000	1,0	1,3	1,6	1,8	1,9	2,0	2,1	2,1	2,2	2,2	N=2000
N=3000	0,8	1,1	1,3	1,4	1,5	1,6	1,7	1,8	1,8	1,8	N=3000
N=4000	0,7	0,9	1,1	1,2	1,3	1,4	1,5	1,5	1,5	1,5	N=4000
N=5000	0,6	0,8	1,0	1,1	1,2	1,3	1,3	1,4	1,4	1,4	N=5000
N=6000	0,6	0,8	0,9	1,0	1,1	1,2	1,2	1,2	1,3	1,3	N=6000
N=7000	0,5	0,7	0,8	0,9	1,0	1,1	1,1	1,1	1,2	1,2	N=7000
N=7500	0,5	0,7	0,8	0,9	1,0	1,0	1,1	1,1	1,1	1,1	N=7500
N=8000	0,5	0,7	0,8	0,9	0,9	1,0	1,0	1,1	1,1	1,1	N=8000
N=9000	0,5	0,6	0,7	0,8	0,9	0,9	1,0	1,0	1,0	1,0	N=9000
N=10000	0,4	0,6	0,7	0,8	0,8	0,9	0,9	1,0	1,0	1,0	N=10000
N=11000	0,4	0,6	0,7	0,7	0,8	0,9	0,9	0,9	0,9	0,9	N=11000
N=12000	0,4	0,5	0,6	0,7	0,8	0,8	0,9	0,9	0,9	0,9	N=12000
N=13000	0,4	0,5	0,6	0,7	0,7	0,8	0,8	0,8	0,9	0,9	N=13000
N=14000	0,4	0,5	0,6	0,7	0,7	0,8	0,8	0,8	0,8	0,8	N=14000
N=15000	0,3	0,5	0,6	0,6	0,7	0,7	0,8	0,8	0,8	0,8	N=15000
	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	
	95%	90%	85%	80%	75%	70%	65%	60%	55%	50%	

ABBR.	COUNTRIES	INSTITUTES	N° INTERVIEWS	FIELDWORK DATES		POPULATION 15+
BE	Belgium	TNS Dimarso	1.009	24/09/2012	27/09/2012	8.939.546
BG	Bulgaria	TNS BBSS	1.003	24/09/2012	26/09/2012	6.537.510
CZ	Czech Rep.	TNS Aisa s.r.o	1.000	24/09/2012	26/09/2012	9.012.443
DK	Denmark	TNS Gallup A/S	1.001	24/09/2012	26/09/2012	4.561.264
DE	Germany	TNS Infratest	1.000	24/09/2012	26/09/2012	64.409.146
EE	Estonia	TNS Emor	1.000	24/09/2012	27/09/2012	945.733
EL	Greece	TNS ICAP	1.001	24/09/2012	26/09/2012	8.693.566
ES	Spain	TNS Demoscopia S.A	1.000	24/09/2012	27/09/2012	39.035.867
FR	France	TNS Sofres	1.004	24/09/2012	26/09/2012	47.756.439
IE	Ireland	IMS Millward Brown	977	24/09/2012	28/09/2012	3.522.000
IT	Italy	TNS Infratest	1.000	24/09/2012	26/09/2012	51.862.391
CY	Rep. of Cyprus	CYMAR	504	24/09/2012	26/09/2012	660.400
LV	Latvia	TNS Latvia	1.000	24/09/2012	27/09/2012	1.447.866
LT	Lithuania	TNS LT	1.000	24/09/2012	27/09/2012	2.829.740
LU	Luxembourg	TNS Dimarso	507	24/09/2012	27/09/2012	404.907
HU	Hungary	TNS Hoffmann Kft	1.003	24/09/2012	27/09/2012	8.320.614
MT	Malta	MISCO International Ltd	502	24/09/2012	27/09/2012	335.476
NL	Netherlands	TNS NIPO	1.004	24/09/2012	27/09/2012	13.371.980
AT	Austria	TNS Austria	1.003	24/09/2012	27/09/2012	7.009.827
PL	Poland	TNS OBOP	1.000	24/09/2012	27/09/2012	32.413.735
PT	Portugal	TNS EUROTESTE	1.000	24/09/2012	27/09/2012	8.080.915
RO	Romania	TNS CSOP	1.002	24/09/2012	26/09/2012	18.246.731
SI	Slovenia	RM PLUS	1.002	24/09/2012	26/09/2012	1.759.701
SK	Slovakia	TNS AISA Slovakia	1.000	24/09/2012	26/09/2012	4.549.955
FI	Finland	TNS Gallup Oy	1.001	24/09/2012	27/09/2012	4.440.004
SE	Sweden	TNS SIFO	1.000	24/09/2012	26/09/2012	7.791.240
UK	United Kingdom	TNS UK	1.002	24/09/2012	27/09/2012	51.848.010
<b>TOTAL EU27</b>			<b>25.525</b>	24/09/2012	28/09/2012	<b>408.787.006</b>