

A large graphic on the page consists of several concentric, semi-circular arcs of varying shades of grey and white, surrounding a central circle. The central circle is split vertically, with the left half being orange and the right half being yellow. Two horizontal dotted lines with arrowheads at both ends pass through the center of the circle, one above and one below the text.

**Views,
Opinions
and Ideas
of Citizens
in Europe on Science**

www.voicesforinnovation.eu

VOICES at a glance

The [VOICES](#) consultation process gathered opinions and ideas about urban waste and innovation, from citizens across the EU. It used science centres and museums as powerful spaces for public engagement. The results were fed back to policymakers in order to influence the direction of EU research policy.

Why VOICES?

At the heart of the VOICES project is the concept of Responsible Research and Innovation ([RRI](#)). This means **engaging the public more** in research and innovation (R&I), making R&I **more socially responsive** and encouraging **shared responsibility** for R&I agendas, practices and outcomes.

How can I use VOICES?

The results of the VOICES consultation were integrated into the European Commission's [Horizon 2020](#) calls for research funding. As such, VOICES is a model for incorporating citizens' voices into RRI. The project outcomes can also be used by other stakeholders at a local and national, as well as European level, for example:

- **Industry** can make use of the results to look into gaps in the market for new innovations;
- **Researchers** can use VOICES results to align their research with the principles of RRI;
- **Educators** can use project outcomes to give a national and European perspective to classroom discussions on current science topics;
- **Universities** can use VOICES as a model for citizen participation.
- **Policymakers and funding agencies** both within and beyond the European institutions can shape their research strategy to fit RRI.

VOICES in numbers

- **1000** European citizens
- **300** hours of consultation
- **100** focus groups
- **27** EU countries
- **24** languages
- **22** external experts

VOICES methodology

VOICES consulted citizens using a renowned method - focus groups - in a unique way:

- **Flexibility:** the VOICES methodology was successfully implemented in a range of cultures and contexts, across 27 EU member states, and can also be adapted for use at national and local levels, and with a range of policy topics.
- **Structure:** the VOICES focus groups worked on four exercises, which engaged the participants on the relevant topics, drawing out collective opinions and ideas in a carefully facilitated face-to-face process.
- **Expertise:** 22 external experts from a variety of backgrounds were involved in validating the methodology, devised by a highly experienced academic team at the VU University Amsterdam's Athena Institute.

The **VOICES focus groups** were led by trained moderators following a semi-structured script. The VOICES methodology guides participants through four simple exercises, in which they discuss face-to-face. The exercises allow them to engage with the chosen topic, relate it to their everyday lives, identify their concerns and propose solutions as a group. This specific methodology ensures the results are both meaningful and representative.

The methodology is available in detail on the VOICES website, designed for you to adapt and use in your own consultation processes: www.voicesforinnovation.eu

VOICES key findings

VOICES took as its subject matter the topic of urban waste as a resource, and the transition to a "zero waste society".

Fitting with the aims of RRI, key findings of the project can be grouped into two key categories.

Urban waste as a resource

On average, every citizen in the EU disposes of around half a tonne of household rubbish every year. Current EU policy aims to reduce both the environmental impact of waste and the use of raw materials needed for production processes. By

VOICES legitimises the EU's current priorities of research and policies on urban waste

- Citizens want less packaging, and more efficient packaging materials. They want to see 100% biodegradable packaging, and plastics that can be fully recycled without loss of quality.
- They want urban waste to be easier to recycle and reuse, in more efficient ways.
- They want manufacturers to be regulated more heavily, taking responsibility for the lifespan and recycling of their products, and ending planned obsolescence.
- More recycling points are needed at convenient locations.
- They want incineration plants to be used as much as possible to produce heat and energy.

VOICES also proposes new ways to strengthen current research

- European citizens feel convenience in the household is crucial. This is a part of waste management often neglected by research. There is a clear need for devices to facilitate sorting and compacting in the home ("smart bins"), or technology which allows waste to be used as a resource in the household.
- Citizens want incentives to separate their waste. This can be done through deposit systems and reward schemes.
- Education and communication are crucial. Citizens are largely unaware of what happens to their waste, and would feel more engaged in the process if knowledge was more widespread.
- Technology can be a motivation to recycle in itself. Citizens feel that systems using chips, electronic tags and apps can help to empower people in the recycling process.
- Citizens want to understand what happens if they don't sort their waste properly for recycling.

Using VOICES outcomes

VOICES outcomes are intended to be used by many types of stakeholders, for a range of purposes.

- **Policy:** *"VOICES shows the determination of the European Commission to give European citizens the opportunity to have their say on societal challenges in the next Framework Programme for Research and Innovation, Horizon 2020."* Gilles Laroche, DG Research and Innovation, European Commission
- **Advocacy:** *"Municipalities are always looking for methods and systems through which to manage waste more sustainably, with the interests of citizens in mind. For them, consultations such as VOICES offer an excellent opportunity to promote local issues at EU level, but also to better understand citizen expectations of their municipality in terms of information on their local waste management system and its implementation."* Vanya Veras, Secretary General, MWE (Municipal Waste Europe)
- **Education and Outreach:** *"VOICES provides science centres an opportunity to learn the visitors' needs. Through this kind of consultation project we can much better understand the needs of our visitors and much better develop ways to address them."* Robert Firmhofer, Director, Copernicus Science Centre, Warsaw, Poland
- **Research:** *"It is clear that convenience in households is, from a citizen's point of view, one of the most important issues, and hence absolutely justified to talk about. To a certain extent the increase of convenience by new waste technologies may therefore also be a good way to make people support modern waste management."* Matthias Rapf, Institute of Sanitary Engineering, Water Quality and Waste Management Group Resources Management and Industrial Wastes (RIK), Stuttgart University, Germany.

More importantly, the VOICES pilot activity was designed with a view to mainstreaming direct citizen consultation across societal challenges in Horizon 2020.

All the project outcomes are now available at www.voicesforinnovation.eu. There, you can consult any of the 27 country reports to find out the detailed results for your country, as well as the overall EU report to gain a European perspective on the results.