



College of Europe
Collège d'Europe



Natozin

WHITE PAPER

ON GOOD PRACTICES IN THE FIELDS
OF ENVIRONMENT AND ENERGY IN
THE EU MEMBER STATES



STUDENT ENERGY GROUP
OF THE COLLEGE OF EUROPE 2016-2017

students of the College of Europe

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Introduction

The White Paper on Environmental and Energy Practices in the European Union comes from the idea to discover the EU and to observe how powerful citizens' initiatives can be. Civil Society is indeed particularly proactive on the energy and environmental issues. Society is moving faster than policy-makers on specific matters and has the capacity to spark movements and initiatives (such as the ones presented in this paper and many others identified by the White Paper Team) that may benefit from an adequate policy framework.

The College of Europe seemed to be the best place to assess the quality of the EU policy framework and find leads for improvement. This international post-graduate school dedicated to European Affairs gathers students from more than 50 countries around the world inclined to work together and to promote relevant initiatives. This holds true for energy and environment issues in particular. Students are stimulated via the activities of the European Energy Policy Chair and through the Energy Group of the Students of the College of Europe, both dedicated to these specific questions. It is in this unique atmosphere that 25 students from various EU Member States – the White Paper team - engaged in this project from October 2016 until March 2018.

For the first part of the research, the team chose to highlight three best practices per EU Member State preferably one at national level and two at local level. Contributors however had full autonomy to choose practices that they really believed in: hence, some countries were exclusively represented by national or regional practices, for instance. The one rule we had set was not to include practices that fall within the (rather extensive) corpus of European law, although the fact that European policy-makers followed their legislative agenda during the elaboration of this White Paper somewhat compromised our rule to avoid practices already covered by EU legislation. This is true in particular with regard to proposals within the Clean Energy Package for All Europeans.

The coordination Committee then selected some of the good practices that could benefit from an improved legal framework, following a strict methodology which is explained below.

Energy and environment are interlinked and more than ever must be seen as a single issue that literally defines the way we live. It is quite extraordinary to observe how Civil Society, Member States and the EU have already linked these two essential and inseparable topics – and to think how they could do so even better.

The practices selected for this White Paper are but a few manifestations of the creativity and engagement of European citizens. The role of the EU in the projects identified cannot be understated, as energy and environment policies are among the most successful and visible EU policies conducted to date. It is, now more than ever, up to the EU to reap the fruits of the environmental consciousness it helped raise and rise to the environmental challenge of our world, together with its citizens.

The Junker App: a new practice for waste management

By Francesca NANTE & Francesca LEUCCI

Junker is a mobile application for smartphones and tablets that helps citizens to recycle products in a new, quick and easy way.

What is “Junker”?

The need for Junker stems from two fundamental observations. The EU Strategy for a Circular Economy, on the one hand, is aimed at making Europe’s economy more sustainable and provides for a framework for public action. The high complexity of waste management, on the other hand, is one of the main hurdles to building a circular European economy and makes new technologies a precious tool to reach this objective.

Just to give an example, uncertainties about the composition of products turn out to be time-consuming and annoying for people used to move and think so fast nowadays.

Junker offers a viable solution to overcome these and other problems arising from waste management. It also relies upon the active involvement of the users themselves whose contribution becomes another smart way to deliver significant results towards effective recycling of waste⁵³.

How the app works is quite easy. Through the camera of mobile devices, it identifies each product using its barcode and provides citizens with all the needed information for recycling its components in a correct and fast way. Therefore, users will be able to know the composing materials of the product that they want to throw away, the right bin, door-to-door collection calendars and other relevant information.

Junker is a national platform available throughout the country. Furthermore, it is already available in four languages, so that even tourists can take benefit of it. Users just need to change their location in order to have updated information in any new town.

The Junker app pursues three main objectives which involve the three dimensions of sustainable development:

1. **Economic sustainability**, meaning the ability of using existing resources in an optimal way (improving the quantity and quality of separate waste), so that municipalities can support a defined level of economic production for an undefined period of time;
2. **Social sustainability**, meaning the ability of current and future generations to create healthy, liveable and successful communities that promote well-being for everyone;
3. **Environmental sustainability**, meaning the ability of natural resources to be renovated or depleted indefinitely with no quality loss.

⁵³ Junker overview, available at: <https://www.slideshare.net/gnoma9/junker-app-motore-per-economia-circolare-dellambiente>

Recycling is a problem for *citizens*



Source: <https://www.slideshare.net/gnoma9/junker-app-presentation-english>

How does “Junker” work?

The idea: a simple solution for a complex problem

The idea of the app came in 2014 from a group of Italian engineers and computer scientists during their travels within Italy and the EU. Willing to recycle products in a proper way, they noticed that complying with locally applicable waste regulation requires time and effort. They had to search for information, download always different apps and visit websites. At some point, they decided to develop a new database *able to associate the barcode of products with their composing materials*. In fact, the barcode is the only element on packaging usually capable of identifying a product in a unique way.

The Junker app put into practice that idea and was released for the first time in March 2015 both on Android and iOS.⁵⁴ It had an immediate and great success among users.

⁵⁴ For more information on the functioning of the application, see: <https://www.youtube.com/watch?v=1NcGmkziURs&feature=youtu.be>

The solution: a new and unique service



We ease the citizens-municipality relationship because Junker:

-  Recognizes more than **1 million** products using their **unique barcode**
-  Indicates the products' composing **materials**
-  Indicates the **correct waste bin or recycling modality** for each product
-  Exactly in the place where the citizen is at the moment (**geo-location**)
-  And when to dispose (**calendar** for door to door collection)



There is no App similar to **Junker** in Europe

Source <https://www.slideshare.net/gnoma9/junker-app-presentation-english>

Junker in practice: a successful story of implementation

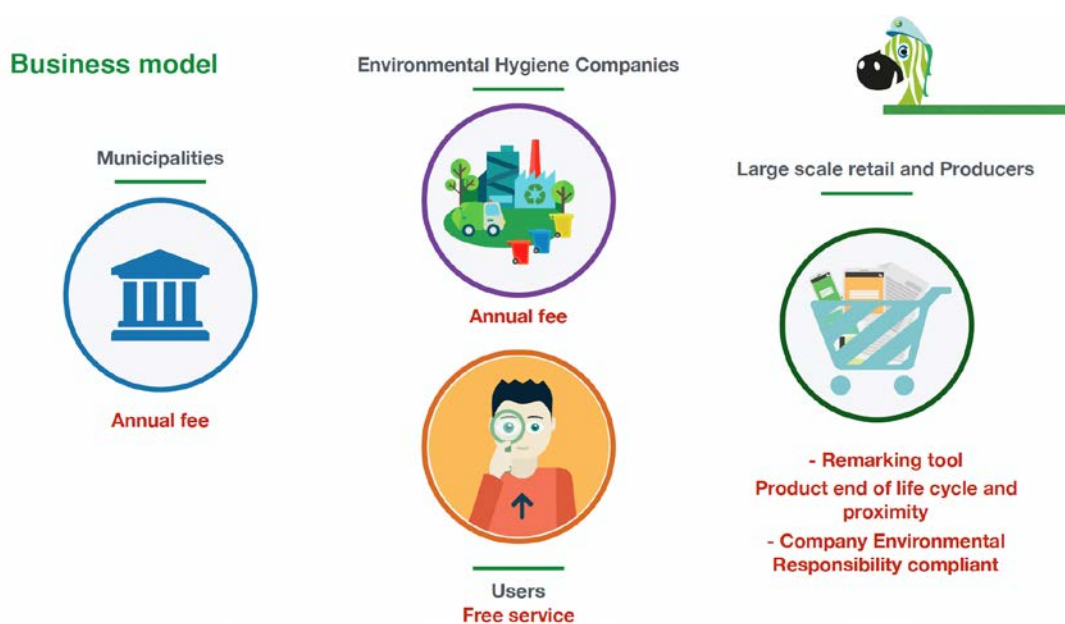
Junker's primary aim is to facilitate life of European citizens. Since Member States are bound under the European Waste Framework Directive to undertake measures for the handling of waste within the EU, the app might be a perfect tool to avoid incurring heavy penalties in case of infringements and to facilitate the achievement of the European goals⁵⁵.

Moreover, while large municipalities are already equipped to provide instructions for recycling in electronic (websites or applications) or paper format, small municipalities encounter much more difficulties to implement an efficient service of waste management information because of the costs and technical skills required. This is the reason why Junker app's first clients were mostly small or medium municipalities, although Junker's customer base also includes big municipalities like Bari, or or large utility companies like HERA.

By subscribing to Junker platform, municipalities get huge benefits.

First of all, they can optimize costs of recycling while maintaining very high quality of data provided to citizens. At the same time the app is enriched with data and zero internal costs for the client. Secondly, the municipalities pay a fee for the service that is financially sustainable, as it is proportionate to the number of inhabitants. Finally, Junker is also a "turn-key" service, since the municipality only has to tell the public how to download and use Junker. All the rest is "up to the app".

⁵⁵ According to the latest data on municipal waste generation and treatment, every person in Europe is currently producing, on average, half a ton of household waste per year. Approximately 40% of wastes are reused or recycled. For some countries more than 80% of wastes still go to landfill (source: Environmental Data Centre on Waste, Eurostat). The management of waste continues to improve in the EU but individuals, businesses and households have to play a bigger role if we wish to achieve the targets laid down in Commission Decision 2011/753/EU (e.g., the increase of waste materials for re-use or recycle to 50% by 2020). See DG Environment website: <http://ec.europa.eu/environment/waste/index.htm>



Source <https://www.slideshare.net/gnoma9/junker-app-presentation-english>

To date, Junker successfully serves Italian municipalities for over 5 million inhabitants all over Italy, standardizing the way of providing information and, at the same time, respecting the differences in local services.

A strategic tool to foster EU policies and suggestions

The Junker app is likely to become a powerful tool to help Member States comply with the minimum requirements set forth in the European Waste Framework Directive as well as the more ambitious objectives of the Circular Economy Package launched in 2015.

The Package established a concrete programme of actions to transform the European economy to make it more sustainable (from linear to circular economy). In January 2018, the European Commission adopted a new series of measures within the Circular Economy Action Plan which includes revised legislative proposals on waste. Among them, new targets for reduction of waste and more concrete measures to overcome different situations across Member States. For instance, a new target has been established for recycling municipal waste by 2030 (65%), packaging waste (75%) and for reducing landfill (10%). In addition to that, the EU will introduce economic instruments to discourage landfilling, harmonised calculation methods for recycling, and incentives for producing greener products⁵⁶.

Within this framework, the Junker app would play a strategic role because it links the new technologies with the active participation of citizens towards a circular economy.

Given the widespread use of smartphones and tablets in Europe, the Junker app provides a service available everywhere and at any time. Furthermore, it considerably increases the dialogue between the administration and citizens. In fact, citizens become more responsible

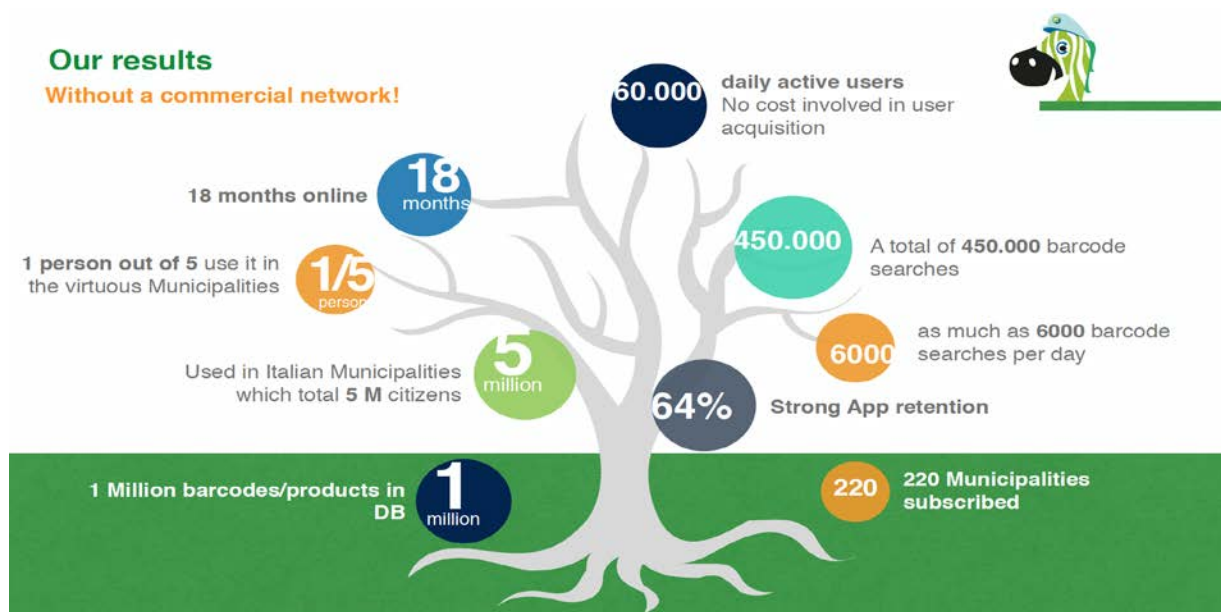
⁵⁶ See http://ec.europa.eu/environment/waste/target_review.htm

with regard to recycling. By increasing cooperation at local level, Junker app fosters the achievement of EU sustainability goals.

Eventually, the app has the potential to make available a significant amount of data on waste collection and disposal varying from place to place. Its spread throughout Europe would be a first step towards a possible harmonization of waste regulations.

The acknowledgement of Junker app through the White Paper would ideally lead to the following positive outcomes:

- Firstly, the app is likely to provide an important source of inspiration for similar projects related to waste management within other Member States, triggering the dialogue between administrations and European citizens by means of the technology already available;
- Once Junker app or apps with similar features have spread all over Europe, the European institutions could take advantage of a considerable and precise amount of data concerning the differences in waste management;
- Lastly, on the basis of the data collected, the European Commission would be able to lay out a more detailed framework for the harmonization of waste regulations.



Source <https://www.slideshare.net/gnoma9/junker-app-presentation-english>