

CE - LOOP

Circular Economies for Living On One Planet



Valladolid (SPAIN)

13 Juin 2021

The City of Valladolid

First information

Valladolid is a city in the autonomous community of Castilla y Leon. With 299,265 inhabitants, the city lies on the banks of the Pisuerga River. It has a significant renaissance heritage with emblematic houses, palaces and monuments such as the San Gregorio College (now the National Sculpture Museum), the Cathedral and the San Gregorio Church.

Today, the province of Valladolid remains a very active and modern area in the fields of health, education and security. It is also very rich in its cultural and linguistic heritage. As for its economy, it ranks 5th in its convergence annex with the European Union.

This city implements real communication strategies to make its city attractive to tourists. It defines itself as an intelligent destination and does not hesitate to highlight its innovative potential on social networks: @valladolidadelante. Its development is sustainable. The policies are the result of processes based on the identification of basic needs of citizens.

Performance chain Green growthTrade-offsR Partnership Nellbeing Participation gy chang ral Infrastr dination Recycling ng op Waste management Regula em change Transition Resources





The circular economy in Spain

Valladolid's case

The Spanish circular economy strategy indicators that reflect those defined by the reflects the objectives of the EU circular EU. Eight specific indicators, corresponding economy package and identifies priority to the areas of the National Action Plan: sectors. The national strategy has 12 general production and consumption; secondary strategic objectives and aims to reduce raw materials; repair, reuse and recycling; national material consumption in relation to gross domestic product (GDP) by 30% by and competitiveness; participation and 2030, using 2015 as the base year. A specific awareness; and employment and training. target for increasing material efficiency (e.g. reducing raw materials production) has been included in 2019.

The government is focusing on five sectors: construction, agri-food, industry, tourism and consumer goods. The results of the strategy will be monitored and evaluated by means of

water reuse taxation; research, innovation

used during The Spanish National Urban Agenda includes the promotion of the circular economy as one of its ten strategic objectives achieve sustainability in to urban development policies in Spain, promoted by the Ministry of Development in 2019.

The circular economy is a topic that has been addressed in an OECD survey in cities and regions that most associate these words: "sustainable development", "climate change", "efficiency", "business model" and "cultural change". They may well be associated with the concept of economy.

In the case of Valladolid, according to the local administration, waste prevention, eco-design and recycling are essential for the circular economy. In particular, the city aims to maximise the use of natural resources, such as agri-food resources, promote industrial symbiosis and improve the selective collection of waste for recycling and material recovery. This involves raising public awareness and participation, strengthening innovation and promoting cooperation between stakeholders.

Valladolid has set out the ecological line it with a reduction in waste, a reduction in waste, a reduction in the use of raw materials in industry and an increase in renewable energy. There are only two criteria for implementing, these sustainable solutions : (1) Keep stimulating economic growth, (2) without neglecting social welfare. This city involves its citizens as stakeholders in the substainable transition. The quest of permanent innovation does not only concern sectors such as recycling or global warming, but also takes into account the problems of the social and solidarity economy. The city wishes to use the resources it has at its disposal, such as its heritage or its knowledge, in various fields. In order to include all the characteristics that this city offers in terms of development, a tool that takes into account different social reasons will be used in this study.

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Erasme - RIVM

Circles of a Social life

A circular Economy for living on one planet - James 2020

the circular To explain solutions implemented in the city of Valladolid, Paul James's social life circle seem relevant. These circles are using as a tool and research framework that are underpinning the city's good environmental and sustainable practices. The challenge is to cultural include strength in the benchmarking progress, taking into account resilience, adaptability and sustainability. The metaphor of 'social capital' approaches cultural themes as if they were based on the accumulation of value, such as the accumulation of money in the economic field. We will see how this tool allows us to show how the city of Valladolid is part of a circular economy policy.

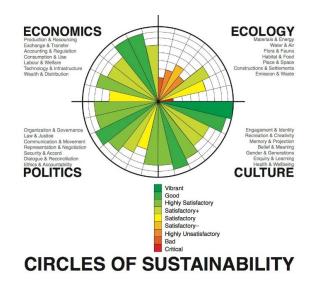
It is a self-assessment tool based on 4 social domains:

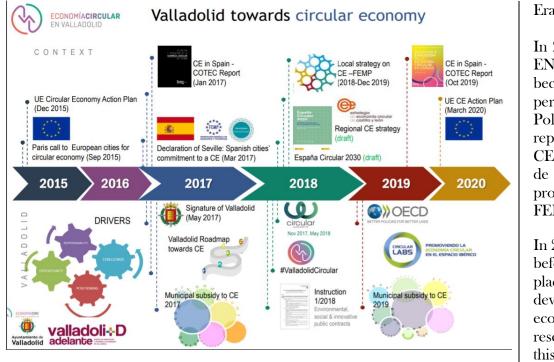
Politics : Organisation and governance, law, communication and criticism, negotiation, security and agreements, dialogue and reconciliation, ethics and responsibility.

Economy : Defined as the practices, discourses and all material forms related to the production, use and management of resources.

Ecology : Concerns materials and energy, but with particular emphasis on the importance of human engagement with and with water and air, wildlife, habitat and space, buildings and transport, emissions and waste.

and Culture: Illustrates itself through identity and ation commitments, creativity, beliefs and ideas, plays a urity role in memory and projection, health and welland being, research and learning.





Sustainable political actions for the city of Valladolid (timeline).

Erasme - RIVM

In 2018, a new diagnosis "Valladolid es circular by ENVIROO" emerged. Communication is becoming more and more important during this period. A hastag is created #ValladolidCircular. Political commitments are recorded in official reports: Espana Circular 2020 which is a Regional CE strategy by the "estrategia de economia circular de castilla y leon". Locally too, the municipality promotes a development axis "Local stategy on CE-FEMP (2018-Dec 2019).

In 2019, the OECD published a survey one month before the Paris Substainable Forum in which it places cities and regions at the heart of a sustainable development model based on the circular economy. Valladolid is one of them. Among the research organisations is the circular labs. During this same period, the municipality grants subsidies for the circular economy. In March 2020, the European Union reinforced the applications of circular economy action plan.

From the latest policies adopted by Valladolid, the city created a dynamic community of micro and small entrepreneurs who act as ambassadors for the circular economy. To be more effective, the aim is to network cities (Eurocities, Michelin). Maximise synergies between municipal services, encourage interactions between actors to benefit from crossfertilisation.

It is an action plan, with a roadmap to follow the evolution of Valladolid in a circular economy pathway. The aim is to promote sustainable companies, entrepreneurs and ecosystems: municpal subsidy to CE projects, Circular weekends (2017,2018,2019), and Circular labs like ERDF projects. The approach is regularly redefined, such as sustainable development strategies. There are multidisciplinary groups: leader innovation agency, political support with budget for CE. Diagnostics are using to optimise all the resources available to the city, such the as analysis of regulatory framework, datasets, indicators, stakeholders'mapping...

POLITICS

Circles of social life

Politically, the city of Valladolid is trying to commit itself to sustainable solutions.

Chronologically, in 2015, Valladolid participated in the European Union's circular economy action plan. Paris call to European cities for circular economy in September 2015. Two years later it signed the Seville agreements: Spanish cities commitment to a CE in March 2017. The "Valladolid road map towards a circular economy" has been created.



Circular weekends in Valladolid

Erasme - RIVM

ECONOMY

Circles of Social life



Valladolid City Council, land of emerging circular development grants.

As far as the economic aspect is concerned, the commitment of the city of Valladolid cannot be made without financial aid, state subsidies or a change in production methods and resources used. The OECD survey reveals that Valladolid's economic activity is characterised by the service sector (83% of companies), followed bv construction (11%) and industry (5%). In 2016 data, the average GDP per capita in Valladolid was 24,646 euros, which is higher than the national average. This is due to the fact that the city is home to large international subsidiaries such as Renault and Michelin.

Their economic strategy is to focus on small and medium-sized enterprises (SMEs), which represent 90% of the region's economy.

Employment rates have been rising since 2014 (the effects of the financial crises in 2008 have dissipated). With a view to a thriving economy, the city of Valladolid has set up a talent retention scheme to encourage local companies to hire new graduates from the University of Valladolid by offering internships. They are the actors of change in this city.

The municipality encourages circular economy projects with subsidies. Two calls for projects in 2017 and 2018 were launched to fund circular economy initiatives. Over these two years 61 projects were selected and funded by the government: €960,000. For the 2019-2021 period, an additional €600,000 have been granted to business groups, research centres or innovation agencies. The projects must create employment and therefore an economic return for the city. Technical and methodological quality is expected as well as innovative features such as eco-design, eco-innovation, certifications, in the form of a platform linking supply & demand by promoting environmentally friendly industrial activity: textiles, rubber, food waste, bioplastics, eco-responsible mobility, are projects have been promoted.

ECOLOGY Circles of Social life

The city of Valladolid is also committed to the ecological aspect of the circular economy. It is part of a strategy adopted by 300 Spanish municipalities to strengthen local governments. The local strategies focus on several issues: zero landfill, recycling (bio-waste), prevention of waste, especially food waste, eco-design, public procurement of green products, mobility and water.

For the city of Valladolid, the municipality is in charge of waste management. It has set up a selective household waste collection system that collects organic and non-organic waste separately. Selective sorting is carried out: separation of paper, glass, batteries, oil... metallic materials or plastic are sorted in the Valladolid Waste



CTR in Valladolid

Treatment Centre (CTR). In order for this sorting to be effective, companies such as ECOVIDRIO or Ecoembes provide waste containers for glass and paper respectively. Integrated management systems are in place. Financially, the municipality abolished the waste tax in 2015, now financed by the general tax system. For bio-waste a composting plant is operational since 2020, which makes certified ecological compost and is sold to companies growing cereals. A total of 5 clean spots have been created in the city where households can come to deposit bulky or toxic waste. Finally, the Victoria district was the playground for a circular economy pilot project in 2018 where the goal is to reach 60% selective sorting by 2030.

Water management is also a concern for the city of Valladolid. Water reuse and awareness of the value of water can be part of a circular economy approach. Water system in public institutions such as schools. In universities, the importance of the water cycle is emphasised, especially for green infrastructure. One can mention Horizon 2020, a programme for research in Europe, partner of the sub-project "Urban Green up" in which Valladolid is implementing a "local strategy for sustainable urban development (EDUSI)". One axis concerns water management : the installation of sustainable urban drainage systems to manage and treat surface runoff affecting parking areas, cycle paths etc. The creation of a floodplain park to minimise the risk of flooding of the Esgueva river, and finally a wastewater treatment with a natural purification plant and a green filter generating its own water for irrigation.

Mobility is at the heart of the city. This is due to the presence of car industry. The search for innovation is ongoing, as is the progress in energy efficiency. The municipality is part of a European funded project **REMOURBAN** which aims to improve the quality of life of citizens through electric mobility, energy efficiency and digital technology. The municipality is moving towards electric public transport fleets. The





EUROPEAN

PROJECTS



circular economy is pervasive in sustainable mobility: green transport, reuse and dismantling of batteries and recharging for green mobility, and land use optimisation programme.

To conclude this section on ecology, a parenthesis on buildings needs to be explained. In accordance with the European directive, the municipality has committed itself to carrying out energy renovations in at least 3% of the city's buildings. Still for a European project **REMOURBAN**, the energy rehabilitation of 398 dwellings on a surface of 24 000m², the district heating and hot water are provided by biomass while the electricity comes from solar energy with photovoltaic panels installed in the facade of the buildings. An eco-design centre has also been launched in 2019 with the aim of creating a space for collaboration and co-creation of innovations (AEICE).

CULTURE

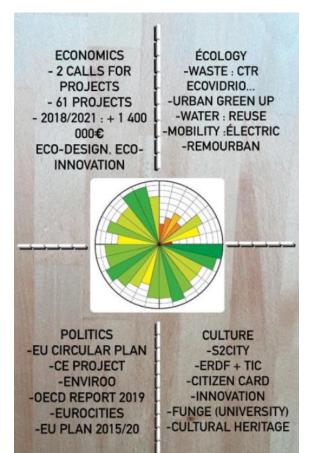
Circles of Social life

The last component is culture. On the circular economy circuit, a roadmap is very often updated as a guideline. Commitments, ideas, projections are to be respected. Culture includes learning and curiosity. In order for solutions to be sustainable, one must integrate its new circularity mechanisms. One of the areas being developed is social and cultural innovation to achieve a knowledge society. The city of Valladolid definies itself as an intelligent city which, thanks to the open-mindedness of the government and the empowerment of the local community, will be able to achieve different goals. Technological tools have been implemented in this city. For example, S2CITY is an intelligent system of integrated citizen and tourist services. The aim of this project is to educate citizens to make better use of municipal services, and to encourage sustainable behaviour. Thanks to ICT (Information and Communication Technologies), Red.es operating with ERDF funds (Intelligent Growth Operational Programme) and the Valladolid City Council, a database of the cultural heritage, transport network, museums and restaurants of the city of Valladolid has been created and indexed. This unique and easy access to municipal services is available via the Valladolid Citizen Card or also on a mobile application. Information about the city's news is published in real time. Gamification techniques are used (fictional characters show us around the city).

On the education side, partnerships between schools and companies are created. The University of Valladolid Foundation (FUNGE) and the City Council have been working together since 2017 to facilitate the professional integration of students once they have graduated. University exchanges are also highly encouraged: in 2018/2019, 1062 foreign students came to study in Valladolid.

Some actors play a decisive role in this transfer of knowledge; this is the case for the Innovation and Economic Development Agency, which organises a circular weekend every year. In the form of presentations, workshops, advice, innovative ideas, lectures, entrepreneurs, companies, public entities (city councils) or simply interested parties, this weekend is a simple and effective way to learn about the sustainable solutions being implemented every day, and to get a foothold in the circular economy. Since 2017, the city of Valladolid has been offering its services and projects to support other cities in their public environmental policies. Valladolid puts online sustainability strategies and catalogues of green solutions. It is a city that keeps its commitments and has a very powerful cultural influence around the circular economy that is beneficial for many other territories.

Finally, its cultural heritage is not to be overlooked either, such as its sculpture museum, renowned for its collection of polychrome sculpture from the Renaissance and Spanish Baroque periods, which has been on display in the former Saint-Grégoire college since 1842. This Isa Belin style building is managed by the Ministry of Culture. Its cathedral, Notre Dame de assumption, with its dominant Baroque style, is one of the largest cathedrals in Europe. It is classified as a property of cultural interest (BIC).



KIn conclusion, Valladolid's strength remains the

political support it has enjoyed since 2015. Economically, culturally and ecologically it is also

competitive. >>

The Michelin site in Valladolid specialises in agricultural tyres. It is an assembly production plant attached to the Clermont-Ferrand research centre. Technically, this centre has efficient technical teams in charge of materials and their characteristics. With this they produce a tyre. Their latest innovative flagship product is the TRAIL X **BIB.** A very resistant and soil-friendly agricultural tyre.





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OECD urban studies - The circular economy in Valladolid - Spain

Urban green-up : https://www.urbangreenup.eu/

S2CITY : http://www.valladolidadelante/

RIVM : http://www.inmc21.com/

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