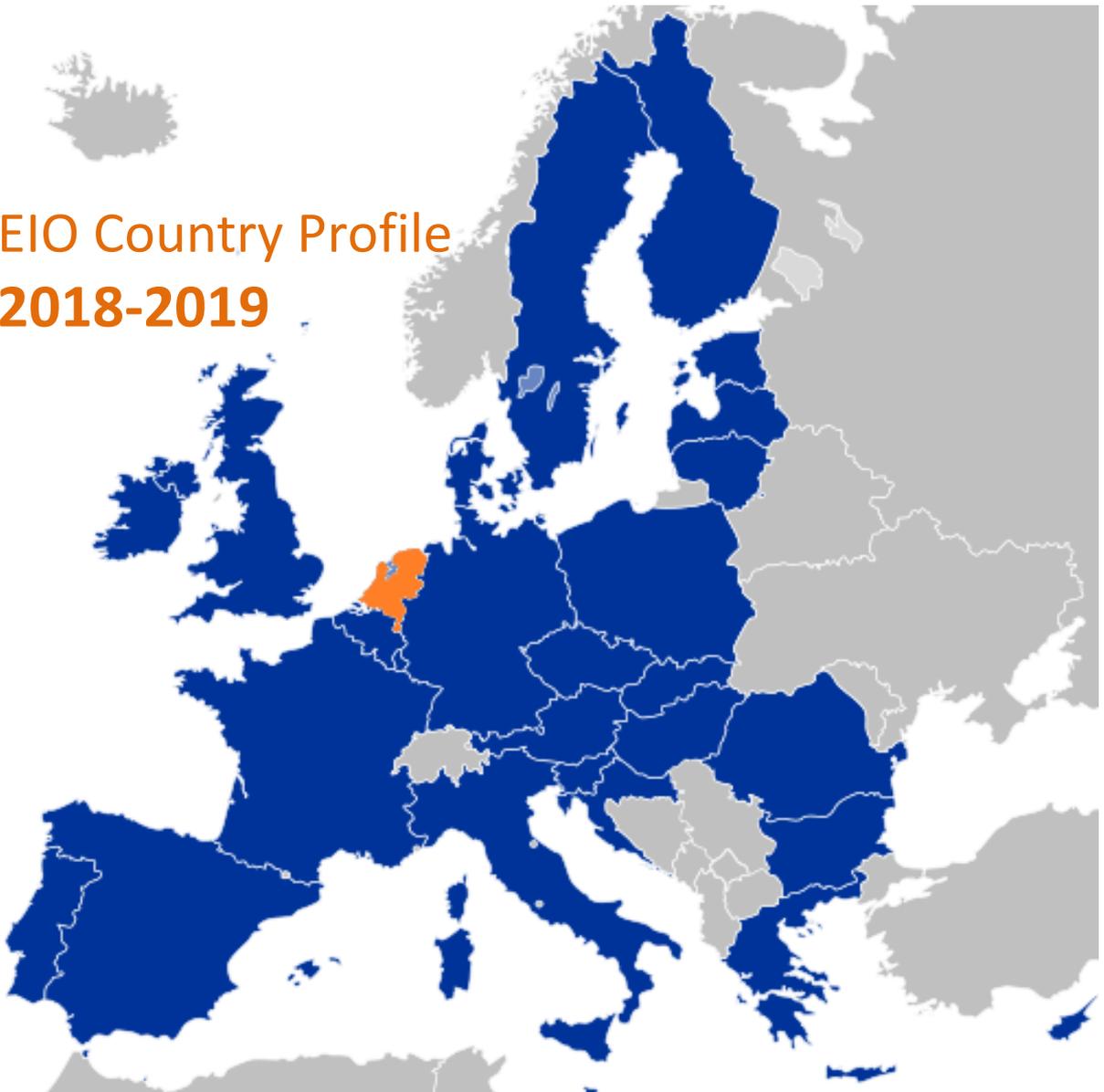




# Eco-innovation in the Netherlands

EIO Country Profile  
2018-2019



# Eco-Innovation Observatory

The Eco-Innovation Observatory functions as a platform for the structured collection and analysis of an extensive range of eco-innovation and circular economy information, gathered from across the European Union and key economic regions around the globe, providing a much-needed integrated information source on eco-innovation for companies and innovation service providers, as well as providing a solid decision-making basis for policy development.

The Observatory approaches eco-innovation as a pervasive phenomenon present in all economic sectors and therefore relevant for all types of innovation, defining eco-innovation as:

“Eco-innovation is any innovation that reduces the use of natural resources and decreases the release of harmful substances across the whole life-cycle”.

To find out more, visit [www.eco-innovation.eu](http://www.eco-innovation.eu) and [ec.europa.eu/environment/ecoap](http://ec.europa.eu/environment/ecoap)

Any views or opinions expressed in this report are solely those of the authors and do not necessarily reflect the position of the European Commission.

# Eco-Innovation Observatory

## Country Profile 2018-2019: The Netherlands

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## **Acknowledgments**

We would like to thank all colleagues who contributed to this report.

## **A note to Readers**

Any views or opinions expressed in this report are solely those of the authors and do not necessarily reflect the position of the European Union. A number of companies are presented as illustrative examples of eco-innovation in this report. The EIO does not endorse these companies and is not an exhaustive source of information on innovation at the company level.

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## Summary

With respect to the Eco-Innovation Index the relative position of The Netherlands in Europe, after years of sloping down to below EU average, improved from 14<sup>th</sup> position in 2017 to 9<sup>th</sup> position in 2019. While in 2017 the Netherlands scored above European average only on resource efficiency outcomes, now the scores on eco-innovation input and eco-innovation outputs are also above the European average. Furthermore, the score on eco-innovation activities has greatly improved (but is still slightly below European average). The score on socio-economic outcomes remains at the same relative level, just below European average. This improvement in scores is a real improvement, not just caused by a change in indicators. Sub-indicators with strong scores of The Netherlands are on Material Productivity (traditionally the highest in Europe) and (less pronounced) on R&D-intensity, Green early stage investments, Eco-innovation related publications and Eco-innovation related media coverage. A real weak score is achieved on ISO14001 registered organisations, which might be caused by methodological issues.

The improved score of The Netherlands seems in line with the revived political attention for sustainability that was achieved after a number of court cases where the Dutch government was convicted for not reaching their own targets. Although in climate field and biodiversity EU targets and formal treaty obligations are not yet met, the court rulings and the increased political attention also spurred action: in the energy field with tailored sectoral and regional plans and with attention for hydrogen; in the biodiversity field, the nitrogen problem led to a building stop, a reduction in maximum speed on the motorways and a lot of discussion about agriculture (not yet finished). Circular economy is a hot topic, but there are still many barriers, including not taking negative environmental effects into account in product pricing, lack of market demand and limited government funding, as well as much attention for recycling and too little attention for more innovative approaches higher in the value chain.

# Introduction

The Netherlands has a high population density, with 17 million inhabitants on roughly 41.500 km<sup>2</sup>. The country is bordering the North Sea on north and west sides, and is rich in water, with 17% of the total surface. Water management is an important focus of the country, as almost a third of the country is situated below sea level and the Netherlands is at the mouth of several rivers (the Rhine, Meuse and Scheldt).

The Netherlands scores good on the Human Development Index (HDI), which looks at three dimensions: a long and healthy life, access to knowledge and a decent standard of living. With a HDI value of 0.931 in 2017, the Netherlands has the tenth highest score (of 189 countries) and has improved its score over the years (UNDP, 2018). The Gross Domestic Product (GDP) in the Netherlands is also relatively high: €52.089 (57.564 US \$/capita) in 2018. This is almost 25% higher than the OECD average (OECD, 2018).

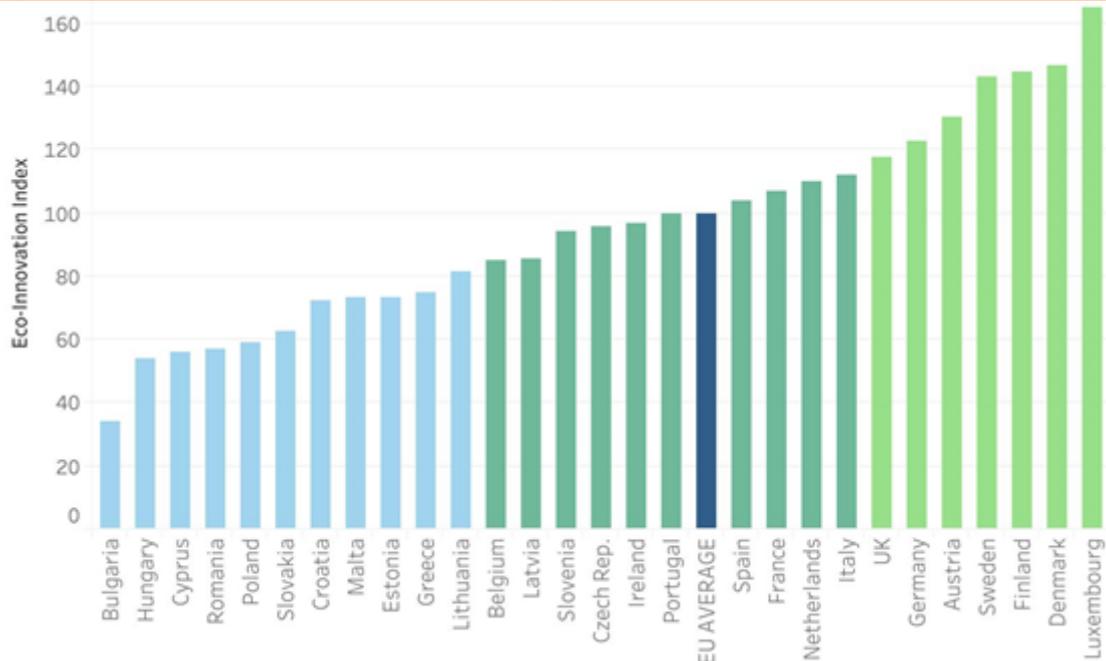
Important environmental challenges are in water quality, air quality, biodiversity and, of course, climate change. The share of **renewable energy** in the Netherlands in 2018 was 7.4% of the gross final energy consumption, making it the lowest share in the EU (with a 18% average share). The Netherlands is with 6.6% also furthest away from its target for 2020 (which is 14%) (Eurostat, 2020). This share is expected to significantly increase in 2019-2020 but will still not be enough to reach the 2020 target. Furthermore, estimations from the Netherlands Environmental Assessment Agency show that the goal of 25% reduction in GHG emissions in 2020 (compared to 1990) will also not be reached, although it can be close (23%) (PBL, 2019). The Dutch government has, in the so-called Urgenda case, however been convicted by the Dutch High Court to meet the targets they set for themselves which has sparked quite some activity.

Another urgent environmental issue in the Netherlands is currently the **nitrogen crisis**. In May 2019 permits for many construction projects were suspended after a decision of the Council of State Act on the topic of nitrogen pollution (more specific, the decision was on the "Programma Aanpak Stikstof"). The Dutch nitrogen emission levels per hectare are the highest in Europe and almost four times the average level. The high pollution levels have a negative impact on the Dutch nature, especially on biodiversity and air quality. The biggest contributors to nitrogen pollution in the Netherlands are agriculture (61% - mostly cows and pigs), road traffic (15%) and industry (9%) (TNO, 2019).

# 1 | Eco-innovation performance

The analysis in this section is based on the EU 28 Eco-innovation Index (Ecol Index) for the year 2019. The Eco-innovation index demonstrates the eco-innovation performance of a country compared with the EU average and with the EU top performers. Ecol Index is a composite index that is based on 16 indicators which are aggregated into five components: eco-innovation inputs, eco-innovation activities and eco-innovation outputs as well as environmental outcomes and socio-economic outcomes

Figure 1 EU28 Eco-innovation Index 2019, composite index

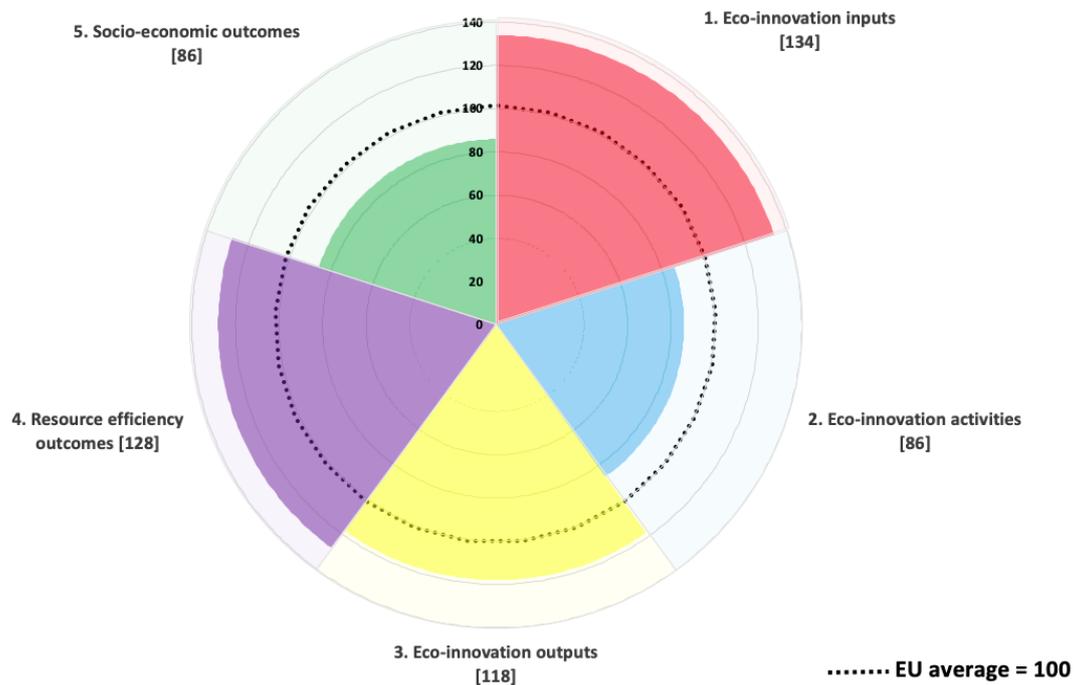


Source: EIO, 2019

In 2019 Eco-innovation Index the Netherlands scored above the European average, at 9<sup>th</sup> position in Europe (Figure 1), surpassing France and Spain, as well as the EU average.

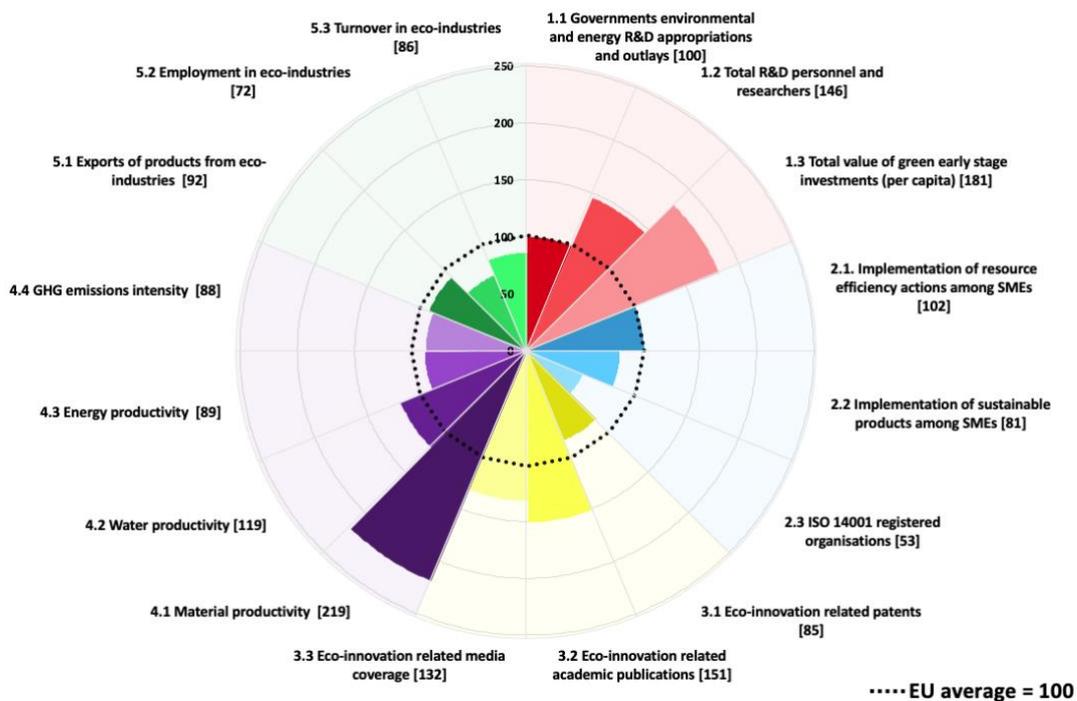
While in 2017 the Netherlands scored above European average only on resource efficiency outcomes, the scores on eco-innovation input and eco-innovation outputs now are also above the European average. Furthermore, the score on eco-innovation activities is higher (but is still slightly below European average), which is likely due to the new data sources used in composition of the 2019 Index. The score on socio-economic outcomes remains at the same relative level, just below European average (figure 2). This improvement in scores is a real improvement, not just caused by a change in indicators.

Figure 2 Five components of the Eco-innovation index for the Netherlands, 2019



Source: EIO, 2019

Figure 3 All indicators of the Eco-innovation index for the Netherlands, 2019



Source: EIO, 2019

- **Eco-innovation inputs**

This category takes into account the share of the government's environmental and energy R&D appropriations and outlays, R&D personnel and researchers, and the value of green early-stage investments in the country. The Netherlands scored 134, which is above EU average. The Netherlands performed especially well in Green early stage investments. Due to its traditionally strong knowledge economy-oriented policy the country has been able to secure strong human capital engaged in R&I activities. Its green R&D intensity (as the % of GDP) is at the EU average, however with the relatively high GDP the actual public funding going for green R&D is substantial.

- **Eco-innovation activities**

This category includes the implementation of resource-efficiency actions and sustainable products among SMEs, and the number of ISO 14001 certificates in the country. The Netherlands scored below EU average with the score of 86. The Dutch SMEs perform on the level of EU average in improving resource efficiency measures, but they perform well below EU average in introducing sustainable products among, according to the Eurobarometer survey. The Netherlands has a low score on ISO14001 registered organisations per million inhabitants. It is notable that the country performs poorly in EMAS statistics too where it is almost in the bottom of the EU ranking.

- **Eco-innovation output**

This category takes into account the eco-innovation-related patents, academic publications and media coverage in the country. In the eco-innovation output sub-index, The Netherlands scored 118 points, which is above the European average. The sub-indicators where it scores well above European average (although not close to the top-ranking countries) are Eco-innovation and circular economy related publications and media coverage. Circular economy has been especially highly popular theme for research, and business and public discussions. With such high interest, it is surprising to see patenting statistics where the country scores 85 that is below EU average of 100.

- **Resource-efficiency outcomes**

This category includes the material, water and energy productivity in the country, as well as the GHG emissions intensity. The Netherlands scored 128 in this category. The high score on resource efficiency outcomes is for a large part determined by the traditional highest score of all countries on Material productivity (219). It is also above EU average in water productivity, however the country's energy productivity and GHG intensity has been below EU average. Despite high focus in the more ambitious climate policies and transition towards cleaner energy there is still strong reliance on fossil fuel in the national energy supply.

- **Socio-economic outcomes**

This category takes into account the eco-industries exports and employment, and the value added in environmental protection and resource management activities in the country. In this sub-index, The Netherlands scores below the EU average with the score of 86. Its eco-innovation products' share in overall export is slightly below EU average, however the actual values green products (in Euros) are somewhat higher than the values of France, Italy and the UK. The share of employments and value added of green sectors in the overall workforce and economy is well below EU average which shows that the Dutch economy focuses more on traditional industries.

The reflection from these analysis one can see that although there seems to be not one single reason for the improvement of the Dutch score, the attention for Eco-innovation and circular economy has increased quite a lot since the government has lost a number of court cases against NGOs and civilians, which force them to adhere to their own ambitious environmental targets (climate, nitrogen).

## 2 | Selected circular economy and eco-innovation areas and new trends

On the topic of climate change mitigation, the Netherlands is not on track with reaching its goals, but, in order to make up the backlog after the Dutch state was sentenced to meet its own targets in the so-called Urgenda case<sup>1</sup>, better plans have been developed and increasing implementation can be seen. In the Climate Agreement of June 2019, plans were created together with over 100 organisations, to reduce greenhouse gas emissions in the built environment, mobility, industry, agriculture and electricity. While the share of renewable energy in the Netherlands was only 7.4% in 2018, it is expected to significantly increase in 2019-2020. The Corona crisis has (at least temporarily) led to a reduction in CO<sub>2</sub>-emissions and increased share of renewable energy.

In the field of innovation, many Dutch organisations believe in the need for **hydrogen**, to use as an energy carrier (solving part of the energy storage obstacle for the energy transition) and as an economic opportunity. In the report “Hydrogen: opportunities for the Dutch industry” (Waterstof: kansen voor de Nederlandse industrie), hydrogen technology is seen an opportunity for one of the most important future export products from the Netherlands. Therefore, they want to be an international leader in the development of the market for hydrogen applications (Ekinetix, Stratelligence, 2019).

Furthermore, in February 2020, a consortium of Gasunie (responsible for the management, operation and development of the gas transport system in the Netherlands), Groningen Seaports and Shell Nederland launched their ambitious plan for **Europe’s largest green hydrogen project**: NorthH<sub>2</sub>. The plan is to produce green hydrogen, using electricity generated by a mega offshore wind farm. By 2030, the offshore wind farm should produce 3 to 4 GW, growing to 10 GW around 2040 (Gasunie 2020).

Another important theme of the Dutch approach on greenhouse gas reduction is a **tailored approach** to each region and situation. For example, one region may prefer wind energy while another prefers solar energy and where some neighborhoods (with newer houses) can go all electric, other neighborhoods might have the opportunity to use residual heat or need to use green gas for heating their houses.

This also means that many responsibilities and choices are made on the **local and regional level**. In the past years, the community energy movement of active citizens has grown further. In 2019, the number of energy cooperatives rose to a total of 582. This means that in around 80% of all Dutch municipalities one or more cooperatives have been established. The collective installed solar capacity doubled in 2018 and grew to 60% in 2019. The cooperatives also play a role in initiating and testing innovations, e.g. generating electricity from gas of land fill sites, organizing auto sharing schemes and community storage projects (Hieropgewekt, 2019).

On the circular economy, it turns out that the majority of circular activities are not innovative: only 2% of the circular activities is seen as innovative. Of the innovative activities, the great majority (over two thirds) is taking place on **recycling**. To a lesser extent (26% combined) there

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<sup>1</sup> <https://www.urgenda.nl/en/themes/climate-case/>

are also innovative activities on higher R-strategies, such as repair, reuse, reduce and refuse (PBL, 2019a).

### Good practice: Swapfiets

Swapfiets is a Dutch startup founded in 2014. For a fixed monthly fee, users get a Swapfiets (a bike with a signature blue tire) that 'always works', as Swapfiets will replace their bike if it is broken and repair the old one. With their innovative business model, Swapfiets has witnessed exponential growth in the past years: in 2017 they had 20,000 subscriptions and in 2019 they already had 100,000. Success factors of their concept are a flexible subscription that can be cancelled on a monthly basis (and with a discount for students), free repairs and a functional app (launched in 2018). They started in the Netherlands but have now expanded their business to several other European countries.

Keywords: bike, lease, repair, app

Internet: <https://swapfiets.nl/en>

Image from: <https://swapfiets.nl/en>



### Good practice: Bedzzzy

Bedzzzy is an innovative mattress, using both new techniques and a new, circular, business model. The mattress is designed in such a way that after use it can be completely processed into a new mattress and raw materials are never lost. While most mattresses use foam, which is difficult to process, and glue pieces together, they cannot be recycled. Bedzzzy mattresses use polyester and steel, which are 100% recyclable.

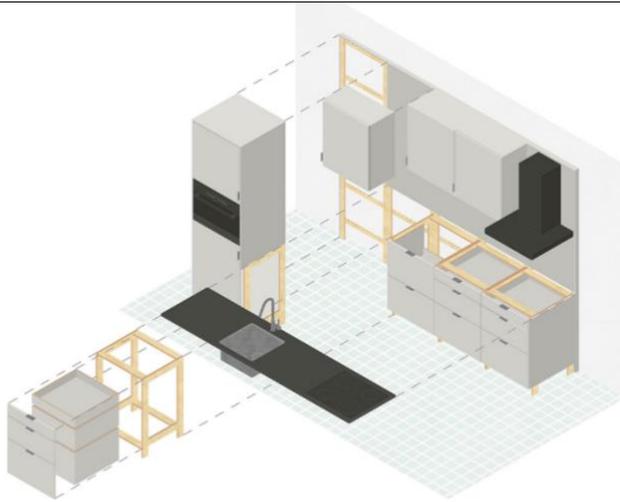


Furthermore, customers can choose if they want to buy the mattress or if they want a subscription (which can be cancelled monthly after one year). If they choose the latter, they receive a fresh mattress after 5 years.

Keywords: bed, modular design, lease option

Internet: <https://bedzzzy.com/>

Image from: <https://bedzzzy.com/>



### ***THE CIRCULAR KITCHEN***

replacing the whole kitchen.

#### **Good practice: Circular Kitchen**

The Circular Kitchen is a concept from TU Delft, AMS Institute, Chalmers and other partners. In 2019 they made a prototype and presented it at the Week of the Circular Economy.

It is quite common for people to replace their kitchen if they move into a new place. The idea of the Circular Kitchen is to last for 10 to 20 years by offering easily adaptable modules so customers can renew and adapt their kitchen to changing needs, without

Keywords: kitchen, adaptable modules, take-back guarantee

Internet: <https://www.ams-institute.org/news/prototype-circular-kitchen-presented-delft/>

Image from: <https://www.tudelft.nl/bk/onderzoek/onderzoeksthemas/circular-built-environment/projects/cik-the-circular-kitchen/>

### 3 | Barriers and drivers to circular economy and eco-innovation in the Netherlands

In 2018, the Netherlands Environmental Assessment Agency (PBL) published a note on lessons on eco-innovation policy (Kishna, M. & A. Hanemaaijer, 2018), looking at opportunities and barriers for eco-innovation in the Netherlands. They mention several barriers:

- Difficulties to find funding for eco-innovation: there are several causes for this difficulty. The first barrier is that environmentally damaging effects of production and consumption are not (fully) taken into account. Furthermore, the payback periods of eco-innovations are usually longer than the payback periods of other innovations, as the capital intensity is often higher. Finally, the availability of venture capital in the Netherlands is small compared to other North-Western European countries.

On a policy level, it is noted that there is limited specific funding for eco-innovation available. This means eco-innovations are competing for funds with generic innovations, which is difficult given the reasons above (a lack of pricing of environmentally damaging effects and a long payback period).

- Changing policies: especially in the sectors of wind energy and solar power, a lack of stable policies (and/or changing policies) is a barrier to companies to invest in green solutions.
- A lack of demand for eco-innovations: a demanding Dutch market is important for eco-innovation because of the learning process through which innovations have to pass before they can be (internationally) successful. The demand for eco-innovations is highly dependent on environmental policies: many organisations will not demand and implement eco-innovations if legislation and regulation do not require it. Environmental and climate policy are therefore crucial for the creation of market demands for eco-innovation.

A barrier linking to this one is the resistance from established players. In some sectors, like greenhouse horticulture and the concrete industry, a limited number of established players have a high concentration of power. They have no direct interest in eco-innovations, therefore holding back changes in their sectors.

Another report, from the Netherlands Environmental Assessment Agency (PBL, 2019a), focuses specifically on the circular economy. They distinguish several barriers for the circular economy in the Netherlands, which are summarized in three main barriers (Volkskrant 2019):

- Consumer behaviour: the majority of Dutch people still seem to prefer to buy 'new' products. An example mentioned is shampoo bottles of recycled plastic, which are bought less often as they do not all have the exact same colour. Furthermore, companies criticize the government for not (always) setting an example.
- Regulation: for new materials and products it is often unclear if, in the way they are used, they comply with existing regulations. Furthermore, extra permits can be needed for using residual flows, leading to a higher administrative burden and possible extra costs.

- Financing: the traditional economy is organised around the concept of ownership. Therefore, it is more difficult for companies that are lending or renting out products to get loans from banks.

## 4 | Policy landscape in the Netherlands

### 4.1 Strategic policy framework

The Dutch Strategy for a Circular Economy was written in 2016 in the Government-wide program **A Circular Economy in the Netherlands by 2050** (Nederland Circulair in 2050). The programme has a final goal of reaching a circular economy in 2050, where there is no waste and the economy runs on reusable materials, and an intermediate goal for 2030 to use 50% less raw materials. Three strategic goals were formulated in this program:

1. Raw materials in existing supply chains are utilised in a high-quality manner and the increased efficiency hopefully leads to a decrease in demand for raw materials.
2. In cases in which new raw materials are needed, fossil-based, critical and non-sustainably produced raw materials are replaced by sustainably produced, renewable, and generally available raw materials.
3. We develop new production methods, design new products and organise areas differently. We also promote new ways of consumption.

In the National Agreement on the Circular Economy (grondstoffenakkoord) in January 2017, companies, governments, environmental organisations, knowledge institutes, financial institutes and many other organisations endorsed the ambition to have a circular economy in 2050.

An important part of this agreement was to jointly develop transition agendas for the transition to a circular economy in five priority sectors: biomass and food; plastics; manufacturing industry; construction sector; and consumer goods. In early 2018, these transition agendas were finished and presented.

In 2019 the **Circular Innovation Implementation Programme** (Uitvoeringsprogramma Circulaire Economie) was launched. This programme translates the five transition agendas into concrete projects and actions for 2019 – 2023. It will be updated regularly and the Netherlands Environmental Assessment Agency (PBL) will publish a progress report every two years.

Table 1: Commitments of sector platforms to reduce GHG emissions by 2030

Sector	Task to reduce emissions:	Remaining emissions
Built environment	3,4 Mton	15,3 Mton
Mobility	7,3 Mton	25 Mton
Industry	14,3 Mton	35,7 Mton
Agriculture and land use	3,5 Mton	28 Mton
Electricity	20,2 Mton	12,4 Mton

In June 2019, the Dutch government launched the **Climate Agreement**. This agreement was created together with over 100 organisations, working on a cohesive set of proposals to achieve the carbon reduction target of 49% reduction in national greenhouse gas (GHG) emissions by 2030 (compared to 1990 levels). It contains commitments made by the five sector platforms, as shown in the table above (Klimaatakkoord, 2019).

Furthermore, one of the elements of the Climate Agreement is that thirty energy regions in the Netherlands will investigate where and how best to generate renewable electricity on land and which heat sources can be used (resulting in **Regional Energy Strategies**). The idea of this approach is that solutions for the energy transition often go beyond administrative boundaries. Bundling the capacity and knowledge of local and regional authorities will lead to better solutions that fit the regions' possibilities and needs. The new classification of regions was based on regional partnerships on the energy theme and input from provinces and regional administrators<sup>2</sup>.

However, a study from the Netherlands Environmental Assessment Agency (PBL, 2019c) in November 2019 concluded that the measures and commitments in the Climate Agreement are not enough to reach the target of 49% GHG reduction in 2030. They argue that the agreement will result in a reduction of 43 – 48%, where 48% will only be reached with the most effective policies and windfalls in the behaviour of actors in response to the policies. Furthermore, they note that the Climate Agreement focusses a lot on the 2030 target, while it does not prepare for reaching the 2050 target.

#### 4.2 Policy instruments, measures, programmes:

With regards to a circular economy, the Netherlands Environmental Assessment Agency (PBL) researched in 2019 all circular activities in the Netherlands. In their advice they wrote that *“There is no prospect yet of an accelerated transition to a fully-fledged circular economy as envisaged by the Cabinet”*. They also found that most of the companies' actions on reducing raw materials are not innovative (only 1.500 of 85.000 mapped activities were considered to be innovative). Many of those innovative actions are focused on recycling.

Furthermore, most governmental actions are also **focused on recycling**. Of the 22.5 million euros the government made available for the circular economy, 10 million euros are meant for recycling plastics and consumer goods and 5 million euros are meant for recycling building materials. The first recommendation of PBL is to give attention to all possibilities for the circular economy, all nine 'Rs' (refuse, rethink, reduce, reuse, repair, refurbish, remanufacture, repurpose, recycle, recover). The first mentioned 'R'-strategies have the highest impact and the last mentioned the lowest.

On the topic of climate change, there have been several developments in the past years. First, the **Gas Act** (Gaswet) was modified in July 2018. The change entails that new buildings for small-scale heat users, like residential houses, (in principal) will no longer be fitted with natural gas connections (so electricity and district heating will be main sources of energy).

Another recent development is the new **speed limit** of 100 kilometres per hour on Dutch highways (Ministry of Infrastructure and Water Management, 2020). This was decided by the Dutch government in November 2019. The reason for this decision was to lower nitrogen emissions, which is needed for the construction industry to resume projects. As explained in the introduction, many construction projects were suspended because of high levels of nitrogen pollution. The new speed limit applies to all highways in the Netherlands, between 06.00 – 19.00 hours, starting from 16 March 2020.

#### Versnellingshuis Nederland Circulair

While most governmental actions on the circular economy are focused on recycling, the “Versnellingshuis Nederland Circulair” (Accelerator for circularity in The Netherlands)

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<sup>2</sup> <https://www.regionale-energiestrategie.nl/default.aspx>

focuses on all circular themes. It is an initiative of the Dutch Ministry of Infrastructure and Water Management and several other organisations to help entrepreneurs taking the next step in the circular economy. To achieve this, they inspire and inform organisations, put them in contact with other entrepreneurs or provide expertise. Furthermore, since 2018 they look for iconic circular projects and hand out the 'Circular Awards'.

Key words: support entrepreneurs, information, inspiration, awards

Internet: <https://versnellingshuisce.nl/>

Image from: <https://versnellingshuisce.nl/>



## CIRCO

CIRCO is a program of the Top Sector Creative Industry, focused on circular design. The goal of the program is to activate and equip companies and creative professionals to get started with circular entrepreneurship. Therefore, they designed a 3-day *Circular Business Design Track* for industrial professionals and a 1-day *Circular Design Class*. In the track and class, companies and professionals learn how to (re)design products, services and business models to do business in a circular way.

Key words: circular design, circular entrepreneurship

Internet: <https://www.circonl.nl/international/>

Image from: <https://www.circonl.nl/>



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# ANNEX: Policy strategies and instruments

**Table A1: National Policy strategies**

	<i>Name of the policy document (strategy, action plan, roadmap)</i>	<i>Relevance for eco-innovation</i>	<i>Relevance for Circular Economy</i>	<i>Relevance for the innovation chain</i>	<i>Input and process targets</i>	<i>Outcome and impact targets</i>	<i>Relevant implementation or governance system</i>
1	A Circular Economy in the Netherlands by 2050 (2016)	N/A	Cross-cutting	Cross-cutting		Circular economy targets: (a circular economy in 2050, and 50% less raw materials used by 2030)	Yes
2	Circular Innovation Implementation programme (2019)	N/A	Cross-cutting	Cross-cutting	Concrete projects and actions formulated for 2019-2023		Yes
3	Climate Agreement (2019)	Eco-innovation is among other objectives	N/A	Cross-cutting		Climate change policy targets (reduction of GHG emissions by 2030, per sector)	yes
4	Regional Energy Strategies (2019)	Eco-innovation is among other objectives	N/A	Cross-cutting	Strategies of 30 energy-regions in the Netherlands	Linked to climate change policy targets (reduction of GHG emissions by 2030, per sector)	

**Table A2: Policy instruments and measures**

Category	<i>Name of instrument</i>	<i>Overall relevance for eco-innovation</i>	<i>Relevance for CE</i>	<i>Relevance for the innovation chain</i>
<b>Direct financial support for eco-innovation</b>				
Grant funding	TKI Toeslag (Topsector research subsidy) <a href="http://www.rvo.nl/subsidies-regelingen/tki-toeslag">http://www.rvo.nl/subsidies-regelingen/tki-toeslag</a>	On innovation in general, not specific on eco-innovation	On innovation in general	R&D and design
	TSE (Topsector Energy research subsidy) <a href="https://www.rvo.nl/subsidie-en-financieringswijzer/subsidies-energie-innovatie-topsector-energie">https://www.rvo.nl/subsidie-en-financieringswijzer/subsidies-energie-innovatie-topsector-energie</a>	Innovation on sustainability in combination with economic growth	N/a	Cross-cutting

Category	Name of instrument	Overall relevance for eco-innovation	Relevance for CE	Relevance for the innovation chain
	MIT samenwerking (Subsidy for SME Cooperation within Topsectors)	On innovation in general	On innovation in general	Cross-cutting
Innovation vouchers				
Loans and credits	Innovation credit (Innovatiekrediet) government guarantee for VC <a href="https://www.rvo.nl/subsidie-en-financieringswijzer/innovatiekrediet">https://www.rvo.nl/subsidie-en-financieringswijzer/innovatiekrediet</a>	On technological innovation in general, not specific on eco-innovation	On technological innovation in general	Experimentation Demonstration
Publicly co-funded venture capital funds (e.g. start-ups)				
Fellowships and postgraduate loans and scholarships				
Equity financing from public banks				
Other (indicate)				
<b>Indirect support for eco-innovation</b>				
Tax incentives/relieves for eco-innovation (businesses, R&D activity)	Innovatiebox (Innovationbox), tax break for R&D related income <a href="https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/winst/vennootschapsbelasting/innovatiebox/">https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/winst/vennootschapsbelasting/innovatiebox/</a> WBSO, generic tax incentive for R&D staff <a href="https://mijn.rvo.nl/wbso">https://mijn.rvo.nl/wbso</a>	On innovation in general	On innovation in general	R&D and design
		On innovation in general	On innovation in general	R&D and design

Category	Name of instrument	Overall relevance for eco-innovation	Relevance for CE	Relevance for the innovation chain
Tax relief for consumers adopting/purchasing green technology/products	Groen Beleggen (Green Funds Scheme), generic tax measure for individuals providing funds for green investments <a href="http://www.rvo.nl/subsidies-regelingen/regeling-groenprojecten">http://www.rvo.nl/subsidies-regelingen/regeling-groenprojecten</a>	Eco-innovation is among other topics	Cross-cutting	Cross-cutting
	VAMIL/MIA: fiscal support schemes for green investments <a href="https://english.rvo.nl/subsidies-programmes/mia-and-vamil">https://english.rvo.nl/subsidies-programmes/mia-and-vamil</a>	Green investments	N/a	
	EIA fiscal support schemes for energy investments <a href="https://english.rvo.nl/subsidies-programmes/energy-investment-allowance-eia">https://english.rvo.nl/subsidies-programmes/energy-investment-allowance-eia</a>	Energy investments	N/a	
	SDE+: Stimulating Sustainable Energy Production, investment support <a href="https://english.rvo.nl/subsidies-programmes/sde">https://english.rvo.nl/subsidies-programmes/sde</a>	Sustainable energy production	N/a	
Taxation of environmentally harmful technologies				
Regulations, targets				
Green public procurement	Green Deal on Circular Procurement <a href="https://www.gdci.nl/nl">https://www.gdci.nl/nl</a>		Cross-cutting	Public procurement
	Dutch SBIR includes eco-innovation subjects <a href="http://www.rvo.nl/subsidies-regelingen/sbir?ns_source=google&amp;ns_rns_linkname=%7Badgroup%7D&amp;gclid=C78iXsWdOis1l4C2QvW3wLfxNGqKpd9qE">http://www.rvo.nl/subsidies-regelingen/sbir?ns_source=google&amp;ns_rns_linkname=%7Badgroup%7D&amp;gclid=C78iXsWdOis1l4C2QvW3wLfxNGqKpd9qE</a>	On innovation in general, includes eco-innovation subjects	Cross-cutting	Public procurement

Category	Name of instrument	Overall relevance for eco-innovation	Relevance for CE	Relevance for the innovation chain
Demand subsidies (e.g. eco-vouchers/subsidies for green products)				
Labeling, certification, standards				
Debt guarantees and risk sharing schemes				
<b>Training, advisory, information support, awareness raising</b>				
Technology transfer and business advisory services				
Business incubation/accelerations				
Eco-innovation challenges, prizes, awards	<a href="https://versnellingshuisce.nl/">https://versnellingshuisce.nl/</a>		Cross-cutting	Cross-cutting
Training for companies, consumers,	CIRCO, specific training for circular design <a href="https://www.circonl.nl/">https://www.circonl.nl/</a>		Design	
Public awareness campaigns, platforms, and outreach activities				
other				
<b>Collaborative platforms and infrastructure</b>				
Clusters, networks, platforms (e.g. industrial symbiosis platforms)	Green Deals, aim for a partnership for a greener economy <a href="http://www.rvo.nl/onderwerpen/duurzame-ondernemen/groene-economie/green-deal?ns_source=google&amp;ns_mchannel=cpc&amp;ns_campaign=%7Bcampaign%7D&amp;">http://www.rvo.nl/onderwerpen/duurzame-ondernemen/groene-economie/green-deal?ns_source=google&amp;ns_mchannel=cpc&amp;ns_campaign=%7Bcampaign%7D&amp;</a>	Focus on green	Cross-cutting	Cross-cutting

Category	Name of instrument	Overall relevance for eco-innovation	Relevance for CE	Relevance for the innovation chain
	ns_linkname=%7Badgroup%7D&gclid=Cj0KEQjwipi4BRD7t6zGl6m75IgBEiQAn7Cff6Df5Xr6XT8KJSm17OkH2uC-_whRDI1c_ngrSoeK-oaAkg68P8HAQ			
Dedicated support to new research infrastructure (piloting facilities)				
other				

## About the Eco-Innovation Observatory (EIO)

The Eco-Innovation Observatory (EIO) is the initiative financed by the European Commission's Directorate-General for the Environment. The Observatory is developing an integrated information source and a series of analyses on eco-innovation trends and markets, targeting business, innovation service providers, policy makers as well as researchers and analysts.

Visit EIO and DG ENV EcoAP website and register to get access to more information  
and to access all EIO reports, briefs and databases.

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