



The (un)successful EU Environmental Policy

Rafael Leite Pinto*

ABSTRACT: The EU asserts itself as a leader when it comes to climate change policy. In this article, we analyze the EU's environmental action regarding the 7th Environmental Action Programme 2020 and the Sustainable Development Goals (SDG's) 2030 set by the UN. We synthesise the successes and failures of the EU's environmental policy in the fields of emissions reduction, circular economy, biodiversity, energy policy and agricultural policy, with the goal of understanding where the EU is lacking and what, therefore, needs stronger measures to reach international goals and avoid an environmental catastrophe. We conclude that the EU will not reach most environmental targets set for 2020 and in order to achieve the 2030 Sustainable Development Goals, what changes need to be implemented to ensure stronger environmental measures.

KEYWORDS: Environmental policy – sustainable development goals – sustainable development goals implementation – climate change

* Student at the Master in European Union Law, University of Minho

1. Introduction

The EU asserts itself as a leader when it comes to climate change policy and environmental protection. Since the 1980s, it has been the driving force of environmental policy between Member States and outside its borders, within international agreements. Recently, the EU set the goal to become the first climate neutral continent through the Green New Deal.¹ Despite these efforts, both EU and worldwide actions have been ineffective in reaching international goals and fighting climate change. According to the UN, the goals set in the Paris Agreement are not ambitious enough.² The last IPCC report states that global temperatures will keep rising.³ Another report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (hereinafter, IPBES) alerts to the possibility of the extinction of 1 million species in the coming decades.⁴ In 2019, the EU reached its overshoot day, that is: the day when we run out of natural resources for the year and start living off credit, earlier than ever, May 10th.⁵ According to the latest report on the 7th Environmental Programme for the EU 2020, the Union will only reach 7 out of 29 goals.⁶

2. EU's greatest environmental success

The greatest EU environmental policy success is, without a shadow of a doubt, the very own existence of the EU policy itself. The climate emergency is a worldwide problem that requires a worldwide solution through cooperation and common standards. In the absence of a worldwide agreement, the EU was able to unite Europe in a single block under the same policy.

The successive enlargements of the EU brought its policy to more and more countries that previously had no environmental protection. The new members were now forced to implement European, higher standard, measures to safeguard the environment. Principles like the Polluter Pays and the Precautionary Principle warrant a mention. The EU policy served as a foundation for a new way of thinking in Member States. Furthermore, abiding the same Regulation in a single market, prevented a “race to the bottom” of environmental standards by companies and States looking to gain an extra edge in the international market.

Another positive point for the EU is the possibility for international, technological, cooperation between Members. The development of new, green technologies is supported by the EU and rapidly spreads to all States.

On a worldwide level, the EU as a block has a much stronger influence on industry and trade standards than any Member State by itself. Before, EU members had no competitive advantage or influence in international practices. Now, with a market of

¹ “A European Green New Deal”, European Commission, Accessed May 18, 2020 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

² “Goal 13: Climate action”, UNEP, Accessed May 18, 2020 <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html>

³ IPCC, Global Warming of 1.5 °C- Summary for Policemakers”, IPCC, 2018, 4, accessed May 18, 2020, https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_I.R.pdf

⁴ IPBES, *Global assessment report on biodiversity and ecosystem services- Summary for policymakers* (Bonn, Germany: IPBES secretariat, 2019).

⁵ “EU Overshoot day: Living beyond nature’s limits”, WWF, accessed May 18, 2020, https://www.footprintnetwork.org/content/uploads/2019/05/WWF_GFN_EU_Overshoot_Day_report.pdf

⁶ “Environmental indicator report 2018. In support to the monitoring of the Seventh Environment Action Programme”, EEA, Luxembourg, 2018, accessed May 18, 2020, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

over 500 million people and a GDP of around 15 trillion Euros (EU-28)⁷ the EU has political and economic influence to set worldwide standards within international trade agreements or international associations like the UN or ILO.

Another advantage of the EU is better access to justice in environmental matters for all European citizens. In 1998, the EU signed the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters that gained force with the Public Access to Environmental Information Directive (2003/4/EC), the Public Participation in Environmental Policies Directive (2003/35/EC) and the (2005/370/EC) Council decision. Today, citizens have more power to hold governments accountable on environmental matters. Besides this individual responsibility, the EU brought accountability to its Members. Now, Member States answer before European institutions on several matters, including the environment and can receive sanctions when they do not comply.

3. The non-compliance problem

The EU is the main source of environmental Regulations for its Members, however, States do not always comply. In fact, environmental Regulations have the second biggest non-compliance rate within the Union⁸. The yearly costs of not implementing environmental Regulations in the EU are estimated to be between 29,7-79,6 billion Euros.⁹

Between 1978 and 2016, the Commission started 2342 non-compliance cases against Members, but these are “just the tip of the iceberg” and there’s no way of knowing how deep it really is.¹⁰

According to the 2019 “Environmental Implementation Review”:¹¹

- Most Members did not take the necessary measures to reach the 2020 circular economy goals;
- Greenhouse gas emissions Regulations have the highest compliance rate, but it’s still not good enough;
- Biodiversity, habitat and species conservation measures score the worst in the compliance scale;
- Most members need to take measures to improve air quality in their cities;
- Members need to enforce stricter regulations on polluting industries;
- In several states, EU’s funds are used inefficiently.

⁷ Pordata - Base de Dados Portugal Contemporâneo, accessed May 18, 2020, [https://www.pordata.pt/en/Europe/Gross+Domestic+Product+\(Euro\)-1786](https://www.pordata.pt/en/Europe/Gross+Domestic+Product+(Euro)-1786)

⁸ T. A. Börzel and A. Buzogány, “Compliance with EU environmental law. The iceberg is melting”, *Environmental Politics*, vol. 28, No. 2 (2019): 315–341, <https://doi.org/10.1080/09644016.2019.1549772>.

⁹ European Commission, COWI A/S and Eunomia Consulting, *The costs of not implementing EU environmental law* (Luxembourg: Publications Office of the European Union, 2019), https://ec.europa.eu/environment/eir/pdf/study_costs_not_implementing_env_law.pdf.

¹⁰ Ibidem.

¹¹ European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Environmental Implementation Review 2019. A Europe that protects its citizens and enhances their quality of life*, Brussels, April 2019, COM(2019) 149 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52019SC0118&from=pt>.

3.1 Greenhouse gas emissions

SDG's 2030	<ul style="list-style-type: none"> Emissions reduction is the foundation of the SDG's. However, we need to highlight Goal 13. <i>“Take urgent action to combat climate change and its impacts”</i>.¹²
EU goals	<ul style="list-style-type: none"> Reduce greenhouse gas emissions (hereinafter, GHG) by 20% until 2020, using 1990 as a starting point, as set in the 7th Environmental Action Programme.¹³ In the Paris Agreement, the EU set the goal to reduce GHG emissions by 40% until 2030. This goal was also set in the (EU)2018/410 Directive. EU's most ambitious GHG emissions goal is to be CO2 neutral by 2050.¹⁴

GHG emissions are the main cause of global warming. Knowing this, governments around the world signed the Kyoto Protocol in 1997, the Paris agreement in 2015, among other International Treaties. The latter set a clear goal of halting global warming below 1,5°C since the pre-industrial era, if possible, and set a commitment to pursue all efforts to stop temperature rise before it reaches 2°C. As of now, human action, since the industrial revolution, has increased global temperatures around 1°C and the warming is not stopping any time soon, since it is predicted that we will reach a 1,5°C increase by 2040.¹⁵ The Paris Agreement did not set ambitious enough goals to stop climate change as the GHG reductions agreed only reach 1/3 of the necessary reduction to keep temperatures from rising.¹⁶ In order to achieve temperature goals, we need to reduce emissions by 45% until 2030 and be carbon neutral by 2050.¹⁷ This will not happen at this rate since in 2019 we set a new record for CO2 levels in the atmosphere, 445 parts per million.¹⁸

In the EU, emissions dropped 23,6% between 1990 and 2015, However, since 2015 this was inverted, and emissions are now rising year after year around 0,5%.¹⁹

¹² “Goal 13: Take urgent action to combat climate change and its impacts”, United Nations. Accessed May 18, 2020 <https://www.un.org/sustainabledevelopment/climate-change/>

¹³ Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 “Living well, within the limits of our planet”, *OJ L 354*, 28.12.2013, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013D1386>.

¹⁴ European Commission, *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, A Clean Planet for all - A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy*, Brussels, November 2018, COM(2018) 773 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0773&from=EN>.

¹⁵ “Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments”, IPCC, 2018, accessed May 18, 2020, <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>.

¹⁶ “Goal 13: Climate action”, United Nations, accessed May 18, 2020, <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html>

¹⁷ “Goal 13: Climate action”, United Nations, accessed May 18, 2020, <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html>.

¹⁸ Peter Dockrill, “It’s Official: Atmospheric CO2 Just Exceeded 415 ppm For The First Time in Human History”, *Science Alert*, May 13, 2019, accessed May, 18, 2020, <https://www.sciencealert.com/it-s-official-atmospheric-co2-just-exceeded-415-ppm-for-first-time-in-human-history>.

¹⁹ “Annual European Union greenhouse gas inventory 1990–2015 and inventory report 2017”, EEA Report, 2017, accessed May 18, 2020, <https://www.eea.europa.eu/publications/european-union->

This can be explained by an increase in emissions by the transport and animal farming sectors. Despite this, it seems like the EU will reach its 2020 emissions goal of a 20% reduction compared to 1990, especially after the Covid-19 outbreak.

When it comes to the 2030 goals, set in Paris, the EU needs an annual reduction rate of around 2% to reach a 40% reduction. This bold target will not be reached with current policies since emissions are back on the rise. According to the EU, when all, current, environmental regulations are applied by all Members, we will be able to achieve a 45% reduction by 2030 and a 60% reduction by 2050.²⁰ Despite this, the most ambitious target of Green New Deal proposal sets a 50% GHG emissions reduction target by 2030 and possibly even 55%.²¹

About 2050, in addition to reducing emissions by 60%, the EU believes in being CO₂ neutral, which means that at some point, the EU will start removing CO₂ from the atmosphere with technology that does not exist yet. According to an IPCC report, only by reaching global carbon neutrality in 2050 will we be able to keep temperature rises below 1,5°C. This is, now, an unlikely scenario since worldwide emissions keep rising and we are nowhere near the technological advances necessary to sink enough carbon from the atmosphere. Furthermore, according to the EU itself, the development of renewable energies, an increase in energy efficiency, a circular economy and a switch to hydrogen as fuel, are not enough to reach emissions neutrality by 2050. If all these sectors are technologically optimized, we can expect a GHG reduction of around 80% compared to 1990.²²

Another important aspect, when it comes to emissions, is air quality. Air pollution in the EU causes half a million premature deaths per year. According to the EU, if we reach carbon neutrality, we will reduce this number by 40% and save 200 million Euros per year on healthcare.²³

In spite of the implementation of several air quality Directives, such as the Industrial Emissions Directive 2010/75/EU; the 2016/2284/EU Directive on the reduction of national emissions of certain atmospheric pollutants; the 2008/50/CE Directive on ambient air quality and cleaner air for Europe; the 2004/107/EC Directive on air contamination; the 2020 air quality goals will only be partially reached. In part, because of the ammonia released by animal agriculture, about 90% of total ammonia emissions.

Looking at the biggest air and water polluters in Europe, according to the UE, the energy sector is the biggest polluter in 11 States; pig and chicken farms are the biggest polluters in 7 States; 2 States are struggling with heavy industry pollution; 3 States do not have good enough waste treatment systems.²⁴

[greenhouse-gas-inventory-2017/download.](#)

²⁰ COM(2018) 773 final.

²¹ European Commission, *Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law)*, Brussels, March 2020, COM(2020) 80 final, https://ec.europa.eu/info/sites/info/files/commission-proposal-regulation-european-climate-law-march-2020_en.pdf.

²² European Commission, *Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999...*

²³ European Commission, *Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999...*

²⁴ "Reflections Paper - Towards Europe by 2030", European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

We conclude that worldwide GHG reduction measures are insufficient to reach international and European goals. Inside the EU, where goals are at a closer reach, we need to prioritise climate change over economic growth to prevent a natural and economic meltdown. According to the SDG Global Index for 2018 for the goal number 13, 22 EU Members have a score above 80 (out of 100) and 5 members are on the top 20 worldwide. However, this score is no reason for celebration since it only shows how the rest of the world is doing even less than us.²⁵

3.2 Energy sector

SDG's 2030	<ul style="list-style-type: none"> • 7. “Ensure access to affordable, reliable, sustainable and modern energy for all”.²⁶
EU goals	<ul style="list-style-type: none"> • The second goal of the 7th Environmental Action Program 2020, based on the Renewable Energy Directive (2009/28/EC), is to reach 20% renewables and increase energy efficiency by 20% in 2020. Besides this, all Members should power their transport sector with at least 10% renewable energy²⁷ • With the “A clean planet for all” program the EU designs a long-term renewable energy strategy, based on the revised Directive (2018/2001). The EU sets the 2030 goal of getting 32% of its energy from renewables as well as increasing energy efficiency by 32,5%.²⁸

The energy sector has been a worldwide priority when it comes to fighting climate change. Fossil fuels have a destructive impact on the environment, from the very start with extraction and production being a resource heavy process that destroys ecosystems and then, the burning of the fossil fuels remains the main cause of GHG emissions. In the EU, the energy sector, including public, residential, industrial and transport sectors are responsible for about 78% of total emissions. Since 1990, emissions from this sector dropped a total of 23%, despite a 16% increase in the transport sector alone.²⁹ (Note that these values do not account for imported goods.)

Energy sector policies focus on three main pillars; (i) renewable energy; (ii) energy efficiency; and (iii) reduction.

When it comes to the first one, it is estimated that the EU will reach the 2020 goal of 20% renewable energy. In 2017, the group was well on its way reaching 17,52%, above the expected target, for that time, of 16%. However, since 2014 progress has slowed down, as well as investment, and if it does not pick up again, the EU will not reach its goal since the growth has been at only 0,44% per year.³⁰ According to a

²⁵ Jeffrey Sachs, Guido Schmidt-Traub et. al., *The SDG index and dashboards report 2018* (New York: Bertelsmann Stiftung, Sustainable Development Solutions Network, 2019), https://s3.amazonaws.com/sustainabledevelopment.report/2018/2018_sdg_index_and_dashboards_report.pdf.

²⁶ “Goal 7: Affordable and Clean Energy”, United Nations, accessed May 18, 2020 <https://www.un.org/development/desa/disabilities/envision2030-goal7.html>

²⁷ Decision No 1386/2013/EU.

²⁸ COM(2018) 773 final.

²⁹ “Annual European Union greenhouse gas inventory 1990–2015 and inventory report 2017”, EEA Report 2017, accessed May 18, 2020, <https://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2017/download>.

³⁰ European Commission, *Report from the Commission to the European Parliament, the Council, the European*

model-study by the European Commission, if all Members comply with the current plan, we can expect anywhere between 18,1-20,7% of renewable energies by 2020.³¹ This model shows that, the most likely scenario is to end up slightly below the goal of 20%. Between Members, there is a big disparity, with 11 countries already being above the set goal and the rest not being on track to reach it.³²

On energy efficiency and energy consumption, the scenario is also not the best, since as of now, we will fail the 2020 goals. Energy consumption in the EU decreased between 2005-2015 in both domestic and industrial sectors. However, both have been increasing since 2015.³³ Even with a small increase in energy efficiency, policies have not been strong enough to reach the goal.

Apart from environmental issues, the energetic transition is a priority for the EU due to several political factors.

First, the economic factor. Between 2008 and 2014, the number of renewable energy jobs grew by 70% employing 1,4 million people with a return of 154 billion Euros.³⁴ The industry is expected to employ another 1 million people until 2030.³⁵ In addition, renewable energies became an economic cluster for the EU in international markets. The EU is the world leader in environmental technologies and with a scale production, it can produce the cheapest energy in the world and become more competitive in other industries.

Second, the development of renewables is the answer for the EU's chronic energy dependency problem. The EU imports 55% of its energy in the form of oil and gas from countries like Russia. The goal is to reduce this need to 20% in 2050.³⁶

If the 2030 goal of 32% renewable energy and a 32,5% increase in energy efficiency are achieved, the EU will be able to reduce its GHG emissions by 40% compared to 1990, as agreed in Paris. However, this growth can only be reached with the rate of increase that we had in the beginning of the decade. If it continues with a 0,44% increase per year, like in the last few years, we will miss the goal by a long shot.³⁷ A substantial investment and a lot more political will are needed for the next decade.

Talking about “political will”, the EU needs to align its funding with its goals, since it keeps subsidising fossil fuels on a larger scale than renewable energies. According to a Directorate-General for Internal Policies of the Union report, the

Economic and Social Committee and the Committee of the Regions. Renewable Energy Progress Report, Brussels, April 2019, COM(2019) 225 final, https://ec.europa.eu/commission/sites/beta-political/files/report-progress-renewable-energy-april2019_en.pdf.

³¹ Scenario calculated with Green-X model, a simulation tool, accessed May 18, 2020, <https://green-x.at/>.

³² “Environmental indicator report 2018. In support to the monitoring of the Seventh Environment Action Programme”, EEA, Luxembourg, 2018, accessed May 18, 2020, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

³³ Final energy consumption by sector and fuel in Europe, European Environmental Agency. Accessed May 18, 2020. <https://www.eea.europa.eu/data-and-maps/indicators/final-energy-consumption-by-sector-10/assessment>

³⁴ COM(2019) 225 final.

³⁵ “Reflections Paper- Towards Europe by 2030”, European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

³⁶ COM(2018) 773 final.

³⁷ “Annual European Union greenhouse gas inventory 1990–2015 and inventory report 2017”, EEA Report, 2017, accessed May 18, 2020, <https://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2017/download>.

EU subsidises fossil fuel industries with 39-200 billion Euros per year.³⁸ Assuming the lowest estimate, that's 630 Euros per European citizen per year. For comparison, in 2012, renewable energy subsidies were approximately 40 billion.³⁹ According to the report: the EU lacks a clear, defined strategy to cut down on fossil fuels; the fossil fuel industry lobby prevents the necessary cuts; several governments lack power to change policies; fossil fuel subsidies are seen as a way of keeping overall prices lower for consumers, protecting the poor. However, according to the International Monetary Fund, these subsidies not only are not efficient at protecting the poor, but they contribute to a bigger inequality, since the bigger the energy consumption, the more someone benefits and those with higher incomes tend to consume more, therefore benefiting more from the subsidies.⁴⁰

Other problems related to EU's renewable energy policy have to do with the strong investment in nuclear and hydroelectric energy. Although we need an exponential growth in renewables, these two methods also have an immeasurable impact on the environment.

For nuclear energy, which represents 13% of total EU energy,⁴¹ there are two main problems. The first is the nuclear waste issue. As of now, there is no solution for the radioactive waste left from energy production. This waste is usually buried somewhere with no public access, but for many, it represents a tic-tac radioactive bomb that can create an unprecedented catastrophe worldwide. Secondly, the consequences of a nuclear accident are too big of a risk and Chernobyl and Fukushima show the inherent dangers of nuclear energy. Although progress has been made in security procedures, an unpredictable natural disaster like an earthquake or tsunami can contaminate the entire world. That is why countries like Germany already announced a phasing out of nuclear energy until 2022.⁴²

For hydroelectric energy, which represents 10% of total EU energy and 36% of the European renewable power⁴³ we need to consider the natural impacts of the construction of large-scale dams and do a careful cost-benefit analysis. A construction this big can completely change an ecosystem, destroy habitats and even change the local climate. That said, instead of building more large-scale dams we should focus on improving the efficiency of the ones we already have and build small dams as a last resort.

The solution seems to lie in solar/wind power that has a smaller natural impact. Subsidies should be allocated to the development of new technologies to improve efficiency and accessibility. Project's such as Tesla's "*Solar Roof*", that turn rooftops

³⁸ Sarabjeet Hayer, *Fossil Fuel Subsidies* (Brussels: Directorate General for Internal Policies, 2017), [https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/595372/IPOL_IDA\(2017\)595372_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/595372/IPOL_IDA(2017)595372_EN.pdf).

³⁹ S. Alberici et al., *Subsidies and costs of EU energy* (Utrecht: Ecofys, 2014), https://ec.europa.eu/energy/sites/ener/files/documents/ECOFYS%202014%20Subsidies%20and%20costs%20of%20EU%20energy_11_Nov.pdf.

⁴⁰ "The Unequal Benefits of Fuel Subsidies Revisited: Evidence for Developing Countries", IMF, WP/15/250, 2015, accessed May 28, 2020, <https://www.imf.org/external/pubs/ft/wp/2015/wp15250.pdf>.

⁴¹ European Commission, *EU energy statistical pocketbook in figures* (Luxembourg: Publications Office of the European Union, 2018), <https://op.europa.eu/en/publication-detail/-/publication/99fc30eb-c06d-11e8-9893-01aa75ed71a1>.

⁴² Holly Fox and Mark Hallam, "German cabinet approves 2022 nuclear shutdown", *DIW*, June 7, 2011, <https://www.dw.com/en/german-cabinet-approves-2022-nuclear-shutdown/a-15134028-1>.

⁴³ Facts of Hydropower in the EU, Euroetric. Accessed May 18, 2020 https://www.vgb.org/hydropower_fact_sheets_2018-dfid-91827.html

into solar panels producing enough energy for each household, need to be researched and developed.

In the end, and despite difficulties, according to the 2018 Global SDG Index, 26 Members of the EU have a score above 80 (out of 100) for the SDG 7 and 7 Members are top 20 worldwide.

3.3 Animal Agriculture

SDG's 2030	<ul style="list-style-type: none"> No SDG mentions animal agriculture directly. However, this sector can impact almost all SDG's, especially the ones related to pollution, resource use, deforestation and biodiversity. That is why this sector got a special analysis from FAO.⁴⁴
EU goals	<ul style="list-style-type: none"> One of the goals of the 7th Environmental Action Program is to reduce the impact of the consumption of animal products by 2020.⁴⁵

Animal farming is particularly devastating for the environment in several ways:

- According to a FAO, 2006 report, this sector accounts for 18% of total GHG emissions, more than the transport sector that is responsible for around 13%.⁴⁶ In another 2013 report, the FAO reduced livestock emissions to 14,5%⁴⁷ but, as stated by another study from the same year, even if we eliminated all fossil fuels by 2030, the livestock sector alone exceeds emissions limits.⁴⁸
- Livestock is responsible for the use of 33% of the planet's fresh water.⁴⁹ According to the Water Footprint Network, it takes 15415L of water to produce 1kg of beef; 5988L to produce 1kg of pig meat; 4325L for 1kg of chicken,⁵⁰ despite this numbers, water saving policies and campaigns rarely ever mention meat consumption.⁵¹
- 1/3 of the planet's total ice-free land is used to grow feed for the livestock industry⁵² that accounts for a total of 45% of the ice-free land.⁵³

⁴⁴ FAO, *World Livestock: Transforming the livestock sector through the Sustainable Development Goals* (Rome: FAO, 2018), <http://www.fao.org/3/CA1201EN/ca1201en.pdf>.

⁴⁵ Decision No 1386/2013/EU.

⁴⁶ FAO, *Livestock's Long Shadow: Environmental Issues and Options* (Rome: FAO, 2006), <http://www.fao.org/3/a0701e/a0701e00.htm>.

⁴⁷ P.J. Gerber, H. Steinfeld, B. Henderson, A. Mottet, C. Opio, J. Dijkman, A. Falcucci and G. Tempio, *Tackling Climate Change Through Livestock – A global assessment of emissions and mitigation opportunities* (Rome: FAO, 2013), <http://www.fao.org/3/a-i3437e.pdf>.

⁴⁸ Richard Oppenlander, *Food Choice and Sustainability: Why Buying Local, Eating Less Meat, and Taking Baby Steps Won't Work* (Minneapolis, MN: Langdon Street Press, 2013).

⁴⁹ "Water footprint of crop and animal products: a comparison", Water Footprint Network, accessed May 18, 2020 <https://waterfootprint.org/en/water-footprint/product-water-footprint/water-footprint-crop-and-animal-products/>

⁵⁰ "Water footprint of crop and animal products: a comparison", Water Footprint Network, accessed May 18, 2020 <https://waterfootprint.org/en/water-footprint/product-water-footprint/water-footprint-crop-and-animal-products/>

⁵¹ Arjen Y Hoekstra, "Water for animal products: a blind spot in water policy", *Environmental Research Letters*, vol. 9, No. 9 (2014), <https://doi.org/10.1088/1748-9326/9/9/091003>.

⁵² "Livestock a major threat to environment. Remedies urgently needed", FAO Newsroom, November 29, 2006, <http://www.fao.org/newsroom/en/news/2006/1000448/index.html>.

⁵³ Philip Thornton, Mario Herrero and Polly Ericksen, "Livestock and climate change", *Livestock x Change*, issue Brief (November, 2011), <https://cgspace.cgiar.org/bitstream/handle/10568/10601/>

- The livestock industry is responsible for up to 91% of Amazon deforestation^{54,55}.
- The livestock sector is the main cause of species extinction, mainly through deforestations and intensive agriculture with the use of harmful chemicals.⁵⁶
- According to a 2008 report, it takes 25 calories of fossil fuels to produce 1 calorie of animal protein⁵⁷
- Only 10-30% of the calories consumed by animals are turned into calories for human consumption⁵⁸.
- In the EU, the livestock sector uses 71% of the agriculture sector's land.⁵⁹
- According to a 2019 IPCC report, if the world adopted a vegan diet by 2050, we could reduce our total emissions by 8 billion tonnes per year, the equivalent of almost 2x EU's yearly emissions.⁶⁰

Despite the magnitude of this problem, the livestock industry is rarely ever mentioned in environmental policies worldwide. Not only it is not mentioned but it's still heavily subsidised by the EU and most governments. According to a Green Peace 2019 report, 18-20% of EU's total annual budget is used to support animal farming.⁶¹ The industry is seen as an economic cluster with rapidly growing exports. This justifies the lack of measures to halt its impacts on the environment despite being one of the 7th Environmental Action Program's goals. So far, the EU did not take any concrete measures to reduce livestock's impacts and according to the European Court of Auditors, despite the Commission's ambitions for a greener CAP, its proposals do not reflect its worries.⁶² The agri-environmental measures adopted within the Common Agricultural Policy have been largely ineffective in curbing the impacts of agriculture as a whole.⁶³ The consensus from several researchers is that the CAP increases environmental degradation, specially through the support of livestock farming.⁶⁴

The Green New Deal will propose a new food policy for the EU with the "Farm to Fork Strategy" but as of now, it seems like the strategy will be focused on

[IssueBrief3.pdf](#)

⁵⁴ Sergio Margulis, *Causes of Deforestation of the Brazilian Amazon*, World Bank Working Paper No. 22. (Washington, DC: World Bank, 2003), <https://openknowledge.worldbank.org/handle/10986/15060>.

⁵⁵ Richard Oppenlander, *Food Choice and Sustainability: Why Buying Local, Eating Less Meat, and Taking Baby Steps Won't Work* (Minneapolis, MN: Langdon Street Press, 2013).

⁵⁶ Richard Oppenlander, "Biodiversity and Food Choice: A Clarification", *Comfortably Unaware Blog*, June 09, 2012, <http://comfortablyunaware.com/blog/biodiversity-and-food-choice-a-clarification/>.

⁵⁷ D. Pimentel and M. H. Pimentel, *Food, Energy, and Society*, 3rd (Boca Raton, FL: CRC Press, 2008).

⁵⁸ Henk Westhoek et al, *The Protein Puzzle* (The Hague: PBL Netherlands Environmental Assessment Agency, 2011), https://www.pbl.nl/sites/default/files/downloads/Protein_Puzzle_web_1.pdf.

⁵⁹ "Feeding the problem: The dangerous intensification of animal farming in Europe", GreenPeace, 2019, accessed May 18, 2020, <https://www.greenpeace.org/eu-unit/issues/nature-food/1803/feeding-problem-dangerous-intensification-animal-farming/>.

⁶⁰ "Climate and Land", IPCC, 2019, chapter 5 p. 77, accessed May 18, 2020, https://www.ipcc.ch/site/assets/uploads/2019/08/2f-Chapter-5_FINAL.pdf.

⁶¹ "Climate and Land", IPCC, 2019, chapter 5 p. 77, accessed May 18, 2020, https://www.ipcc.ch/site/assets/uploads/2019/08/2f-Chapter-5_FINAL.pdf.

⁶² "Future of the CAP", European Court of Auditors, 2018, accessed May 18, 2020, https://www.eca.europa.eu/Lists/ECADocuments/Briefing_paper_CAP/Briefing_paper_CAP_EN.pdf.

⁶³ "Special Report n°21/2017: Greening: a more complex income support scheme, not yet environmentally effective", European Court of Auditors, 2017, accessed May 18, 2020, <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=44179>.

⁶⁴ Guy Pe'er et al., "Action Needed for the EU Common Agricultural Policy to Address Sustainability Challenges", *People and Nature* (August, 2020), <https://doi.org/10.1002/pan3.10080>.

food waste, pesticide and antibiotic use, instead of the broad environmental impacts of the livestock sector.⁶⁵

The EU can take several measures to reduce livestock's environmental impacts.

First, following Canada's example, that in the beginning of 2019 released their new, lobby-free, dietary guidelines that reflect sustainability criteria. Because of this, animal products should be extremely reduced in people's diets.⁶⁶ At the end of 2018, the EAT-Lancet commission, responsible for developing a study on how to feed 10 billion people by 2050 in a healthy, sustainable way, concluded that we need a drastic reduction in the consumption of animal products.⁶⁷ Obviously, nutritional recommendations rarely reflect people's consumption habits since, according to a 2013 study, if we actually followed the current guidelines, we could cut water use by 41% in Southern Europe, by 27% in Eastern Europe and by 32% in northern Europe.⁶⁸ However, a recommendation like Canada's would raise awareness and show the EU's real political will to fight climate change. According to a 2014 study, if EU's meat consumption halved, which would still be above the EAT-Lancet Commission's recommendations, agricultural emissions would fall up to 40%.⁶⁹ Worldwide, adopting a plant-based diet could reduce agricultural emissions by 80%, according to the EAT-Lancet Commission.

On the other side, industry subsidies need to be reallocated to the development of alternatives to meat such as the already existent, plant-based meat or lab grown meat. The development of these alternatives is seen as the solution to livestock's environmental impacts. At the same time, by incentivising this new industry, we can create new jobs, or at least slowly transition some current agriculture jobs to this new sector area. According to market research, the plant-based meat sector, not including lab grown meat, is worth over 5 billion Euros and it's growing exponentially with the EU as its main market.⁷⁰ In the beginning of 2019, the first ever plant-based meat company to enter the stock market, Beyond Meat, shocked the stock world by growing more than 500% in a few months and it is already worth more than some of the world's top meat producers.⁷¹ Clearly, there is a rapidly growing market for these products that can represent a solution to the massive environmental impacts of the livestock industry. By subsidising this new industry from the start, the EU can become the main world producer and exporter. As it seems now, the EU has two choices: keep subsidising a declining industry that keeps destroying the environment

⁶⁵ Farm to Fork Strategy – for a fair, healthy and environmentally-friendly food system, European Commission. Accessed May 18, 2020, https://ec.europa.eu/food/farm2fork_en.

⁶⁶ “Canada's food guide”, Government of Canada, accessed May 18, 2020 https://food-guide.canada.ca/en/?utm_source=canada-ca-foodguide%20en&utm_medium=vurl&utm_campaign=foodguide

⁶⁷ Walter Willett et al., “Food in the Anthropocene: the EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems”, *The Lancet*, vol. 393, No. 10170 (February 2, 2019): 447-492, [https://doi.org/10.1016/s0140-6736\(18\)31788-4](https://doi.org/10.1016/s0140-6736(18)31788-4).

⁶⁸ D. Vanham, A. Y. Hoekstra and G. Bidoglio, “Potential Water Saving through Changes in European Diets”, *Environment International*, vol. 61 (2013): 45-56, <https://doi.org/10.1016/j.envint.2013.09.011>.

⁶⁹ Henk Westhoek et al., “Food Choices, Health and Environment: Effects of Cutting Europe's Meat and Dairy Intake,” *Global Environmental Change* 26 (2014): pp. 196-205, <https://doi.org/10.1016/j.gloenvcha.2014.02.004>.

⁷⁰ “Meat Substitutes Market worth \$3.5 billion by 2026”, MarketsandMarkets, accessed May 18, 2020 <https://www.marketsandmarkets.com/PressReleases/meat-substitutes.asp>.

⁷¹ Noel Randewich, “What is a Beyond Meat burger worth to hungry investors?”, *Reuters*, June 25, 2019, <https://www.reuters.com/article/us-usa-stocks-beyond-meat/what-is-a-beyond-meat-burger-worth-to-hungry-investors-idUSKCN1TQ2JD>.

and lose profits, jobs, and the fight against climate change or slowly transition to a new way of producing food with massive economic and environmental benefits.

3.4 Ocean and marine policy

SDG's 2030	<ul style="list-style-type: none"> • “14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.”⁷²
EU Goals	<ul style="list-style-type: none"> • In the 7th Environmental Action Program and based on the 2008/56/CE Directive, the EU established the goal of maintaining healthy marine stocks by 2020 • In the same program, and based on the 2000/60/CE Directive, the EU set the goal of reaching good coastal line water quality and good freshwater quality by 2020 • In the Circular Economy Action Program, the EU set the goal of reducing marine litter by 30% until 2020.⁷³

The SDG 14 is dedicated to “life under water” and intends to, by 2020: (i) manage, protect and restore marine ecosystems, reducing acidity levels; (ii) effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices; (iii) conserve at least 10 per cent of coastal and marine areas; (iv) prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing; and (v) by 2025, prevent and significantly reduce marine pollution of all kinds, in particular, from land-based activities, including marine debris and nutrient pollution.

Marine policy focuses on several problems such as overfishing, ocean pollution, water quality and loss of biodiversity.

Regarding the first one, according to the FAO, about 75% of fishing zones worldwide are overfished.⁷⁴ At this rate, it is estimated that by 2048, we could see fishless oceans.⁷⁵ In the EU, current fish consumption is above the stock maintenance limit, mainly in Southern Europe,⁷⁶ where the Mediterranean Sea is 80% overfished.⁷⁷ Since 2007, the percentage of sustainable fishing has been increasing, rising from 34% to 60% in 2015, but these values are not good enough.⁷⁸ As of now, the EU is expected to miss the 2020 targets.⁷⁹

⁷² “Goal 14: Life Below the Water”, United Nations, accessed May 18, 2020 <https://www.un.org/development/desa/disabilities/envision2030-goal14.html>

⁷³ European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Closing the loop - An EU action plan for the Circular Economy*, Brussels, December, 2015, COM(2015) 614 final, <https://ec.europa.eu/transparency/regdoc/rep/1/2015/EN/1-2015-614-EN-F1-1.PDF>

⁷⁴ “General situation of world fish stocks”, FAO, accessed May 18, 2020 <http://www.fao.org/newsroom/common/ecg/1000505/en/stocks.pdf>

⁷⁵ Boris Worm et al., “Impacts of Biodiversity Loss on Ocean Ecosystem Services”, *Science*, vol. 314, No. 5800 (March 2006): 787-790, <https://doi.org/10.1126/science.1132294>.

⁷⁶ “Status of marine fish and shellfish stocks in European seas”, European Environmental Agency, accessed May 18, 2020 <https://www.eea.europa.eu/data-and-maps/indicators/status-of-marine-fish-stocks-4/assessment>

⁷⁷ “Reflections Paper- Towards Europe by 2030”, European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

⁷⁸ “Reflections Paper- Towards Europe by 2030”, European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

⁷⁹ “Environmental indicator report 2018. In support to the monitoring of the Seventh Environment

When it comes to ocean pollution, it is caused by several factors such as out of control landfills, untreated sewage, fishing litter and coastal pollution. About 80% of marine pollution originates in land and it is estimated that the total cost for the EU is around 700 million Euros per year.⁸⁰

The 2008/56/CE Marine Strategy Framework Directive sets the goal of reducing marine litter quantity by 30% in 2020. However, only in May 2019 did the EU adopt stronger measures to reach this goal and fight the main sources of pollution. The EU announced a ban on some single use plastics, starting in 2021, and established more ambitious goals for recycling products like water bottles.⁸¹ Despite this, the Union still needs to ban intentional microplastic use that represent 80% of the litter found in the Mediterranean⁸² and constitute a threat to marine ecosystems and human health.

Due to pollution, ocean water quality has been decreasing worldwide. Only 40-58% of European coastal waters are considered of good quality⁸³ which means the 2020 goal will not be reached.⁸⁴

For the SDG 14, 4 EU Members score above 60 while 5 are on the top 20 worldwide This is the worst score of all SDG's for the EU.⁸⁵

3.5 Biodiversity

SDG's 2030	<ul style="list-style-type: none"> • “15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”.⁸⁶ • “14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development”.⁸⁷
-------------------	--

Action Programme”, EEA, Luxembourg, 2018, accessed May 18, 2020, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

⁸⁰ “Our Oceans, Seas and Coasts”, European Commission, accessed May 18, 2020 http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm

⁸¹ “Circular Economy: Commission welcomes Council final adoption of new rules on single-use plastics to reduce marine plastic litter”, European Commission, Press corner, 2019, accessed May 18, 2020 http://europa.eu/rapid/press-release_IP-19-2631_en.htm

⁸² “Our Oceans, Seas and Coasts”, European Commission, accessed May 18, 2020 http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm

⁸³ “Reflections Paper-Towards Europe by 2030”, European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

⁸⁴ “Environmental indicator report 2018. In support to the monitoring of the Seventh Environment Action Programme”, EEA, Luxembourg, 2018, accessed May 18, 2020, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

⁸⁵ Sachs, Schmidt-Traub et. al., *The SDG index and dashboards report 2018*.

⁸⁶ “#Envision2030 Goal 15: Life On Land”, United Nations, accessed May 18, 2020 <https://www.un.org/development/desa/disabilities/envision2030-goal15.html>

⁸⁷ “Goal 14: Life Below Water”, United Nations, accessed May 18, 2020 <https://www.un.org/development/desa/disabilities/envision2030-goal14.html>

EU goals	<ul style="list-style-type: none"> • The number one goal of the 7th Environmental Action Program is dedicated to biodiversity and protecting ecosystems. This goal is split into 6 smaller goals: <ol style="list-style-type: none"> 1. Reduce areas affected by eutrophication by 43% compared to the year 2000. 2. Improve agriculture soil quality management. 3. Keep the loss of arable land below 800km² per year with the goal of reaching neutrality by 2050. 4. Sustainably manage forests. 5. Ensure sustainable fish stocks. 6. Stop ecosystem degradation, halt biodiversity loss and restore them as much as possible. 7. Ensure that 34,5% of species protected by the Habitats Directive 92/43/EEC, are in favourable or improved condition. Ensure that 78% of species protected by the Birds Directive 2009/147/EC are in improved <i>status</i>. 8. Ensure that 34% of protected habitats show conservation improvements. 9. Reach a good level of coastal and freshwater quality.
-----------------	---

The SDG 15 is dedicated to life on land and intends to:

- By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements; promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally;
- By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development; combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world;

In May 2019, an IPBES report reached headlines alerting for the risk of extinction of 1 million species in the next decades. This is due to five main factors: physical changes in land and sea; direct exploitation of organisms; climate change; pollution; progression of invasive species. According to the report, current conservation policies are not enough to reach 2030 goals. Moreover, biodiversity is intrinsically linked to 8 SDG's, putting all of them at risk. The 2020 global biodiversity goals will also not be reached.⁸⁸

At the EU, from the 9 goals mentioned above, only 1 will be reached, the goal on sustainable forest management.⁸⁹ This means that the EU's policies are not enough or are not implemented by Member-States. In fact, for some goals, there are no designed

⁸⁸ "UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'", United Nations, 2019, accessed May 18, 2020 <https://www.un.org/sustainabledevelopment/blog/2019/05/nature-decline-unprecedented-report/>.

⁸⁹ "Environmental indicator report 2018. In support to the monitoring of the Seventh Environment Action Programme", EEA, Luxembourg, 2018, accessed May 18, 2020, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

policy measures, for example, for the arable land goal.⁹⁰ In the EU, only 23% of species and 16% of habitats are in good conditions.⁹¹

According to the Environmental Implementation review report, on the implementation of EU’s policies by Members, this is the worst scoring area of all.⁹² However, the areas protected by the Natura 2000 program have been increasing and now reach 18% of total land ecosystems in the EU.⁹³

At last, it’s also important to mention the impacts of the European consumption of imported agricultural goods that are destroying ecosystems outside the EU, such as the import of massive quantities of soy from Brazil, Argentina and Paraguay to serve as feed for European livestock or palm oil from southeast Asia for food and fuel production. The EU is the biggest market in the world for palm oil.⁹⁴

On a global scale, 19 EU Members score above 70 on the SDG 15 and 14 of them are in the top 20.⁹⁵ Unfortunately, and once again, this shows that the EU, despite not taking strong enough measures, is still doing a better job than most of the world, although this might not be a fair comparison for other, less developed countries.

In 2020, in Beijing, a global biodiversity conference will take place and is set to design a new conservation strategy. The EU is also set to launch a new biodiversity strategy within the Green New Deal. These will be the last chances to take strong measures to reach 2030’s goals.

3.6 Circular economy and domestic consumption

SDG’s 2030	<ul style="list-style-type: none"> • “12. Ensure sustainable consumption and production patterns”.⁹⁶
EU goals	<ul style="list-style-type: none"> • The second goal of the 7th Environmental Action Program is dedicated to resource efficiency and the green economy. <ol style="list-style-type: none"> 1. Improve economic performance while reducing natural resources use. 2. Reduce per capita waste production. 3. Recycle 50% of domestic waste. • 12. Promote a bigger share of the green market in the EU raising competitiveness for the eco-industry. • 13. Raise public and private investment on environmental related actions, achieving 20% of total EU’s budget. • By 2030, all Members should reuse or recycle 60% of municipal waste and 70% of packages. • By 2035, all Members need to reduce landfills to a destination for only 10% of total waste.

⁹⁰ Ibidem.

⁹¹ “Reflections Paper-Towards Europe by 2030”, European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

⁹² COM(2019) 149 final.

⁹³ Natura 2000 Barometer, European Environmental Agency. Accessed May 18, 2020 <https://www.eea.europa.eu/data-and-maps/dashboards/natura-2000-barometer>.

⁹⁴ European Parliament, Resolution of 4 April 2017 on palm oil and deforestation of rainforests (2016/2222(INI)), https://www.europarl.europa.eu/doceo/document/TA-8-2017-0098_EN.html.

⁹⁵ Sachs, Schmidt-Traub et. al., *The SDG index and dashboards report 2018*.

⁹⁶ “Goal 12: Responsible Consumption and Production”, United Nations, accessed May 18, 2020 <https://www.un.org/development/desa/disabilities/envision2030-goal12.html>.

The objectives of Goal 12 are:

- By 2020, achieve the environmentally sound management of chemicals and all waste throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- By 2030, achieve the sustainable management and efficient use of natural resources; halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses; substantially reduce waste generation through prevention, reduction, recycling and reuse; ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature; encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

The consumption of natural resources has grown 14 times between 1900 and 2005 and is expected to double by 2050.⁹⁷ That is why the transition to a circular economy is imperative. A 2019 study found that promoting a circular economy is necessary or contributes to 12 out of the 17 SDG's.⁹⁸ In fact, excessive production and consumption are the main causes of all environmental problems. These issues are worsened when there are inefficiencies in production, waste in consumption and mismanagement in disposal. Although the circular economy is essential, it is only neutral and will only be effective for the management of resources if it comes along a reduction in overall consumerism.

The circular economy also has economic incentives. In 2016, the EU alone generated 147 billion Euros with repairs, reused materials, and recycling. It is estimated that, by 2030, the circular economy will be worth 1,8 trillion and create another 1 million jobs.⁹⁹

Between 2007-2016, the percentage of materials used in the circular economy, at the EU, only grew from 9,3% to 11,7%.¹⁰⁰ The rate of municipal waste recycled went from 36,5% to 46,4%¹⁰¹ while the recycling rate of packaging went from 59,2% to 67,2%.¹⁰² These numbers show a slower progress than necessary. Despite the progress, 2016 registered a record quantity of waste produced in the EU.¹⁰³

⁹⁷ "Reflections Paper- Towards Europe by 2030", European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

⁹⁸ Patrick Schroeder, Kartika Anggraeni, and Uwe Weber, "The Relevance of Circular Economy Practices to the Sustainable Development Goals", *Journal of Industrial Ecology*, vol. 23, No. 1 (2018): 77-95, <https://doi.org/10.1111/jiec.12732>.

⁹⁹ "Reflections Paper- Towards Europe by 2030", European Commission, 2019, accessed May 18, 2020, https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf.

¹⁰⁰ "Circular material use rate", Eurostat, accessed May 18, 2020 https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=cei_srm030&plugin=1.

¹⁰¹ "Recycling rate of municipal waste", Eurostat, accessed May 18, 2020 https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_11_60&plugin=1.

¹⁰² "Recycling rates for packaging waste", Eurostat, accessed May 18, 2020 <https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=ten00063&plugin=1>.

¹⁰³ "Waste statistics", Eurostat, accessed May 18, 2020 https://ec.europa.eu/eurostat/statistics-explained/index.php/Waste_statistics.

Only in 2015 did the EU launch the Circular Economy Action Plan,¹⁰⁴ with 54 measures¹⁰⁵ set to change all phases of the lifecycle of goods, from production to consumption, waste treatment, the creation of markets for secondary materials, innovation, investment and monitorization. The 5 main lines of action are plastics, food waste, important raw materials, construction and demolition, biomass, *inter alia*. In 2019, all measures were implemented but the results will only be seen in the next decades. For 2020, it's expected that the EU will reach 4 out of the 13 green economy goals set in the 7th Environmental Action Programme.¹⁰⁶ A new Circular Economy Action Plan will also be approved within the Green New Deal. As of now, we know that it should be focused on creating long lasting products that are easy to repair and upgrade, investment into eco-design, phasing out of single-use plastics and restricting microplastics.¹⁰⁷

The failures of the EU's policies in this area reflect the poor result in the SDG Index for Goal 12. Only 11 Members score above 60. After the marine goals, this is the worst score for the EU.¹⁰⁸

4. Conclusion

The EU's environmental policy has registered significant advances in the last 3 decades. The European integration, the growth of international influence, the significant increase in GDP whilst reducing GHG emissions, the growth in renewable energies and the circular economy, represent the biggest victories for the EU in the fight against climate change. However, EU's environmental policy fails to meet most goals set by itself. The lack of concrete measures to protect biodiversity and habitats, to reduce the environmental impacts of animal farming, to manage fish stocks in a sustainable way, to decrease emissions from the transport sector, to reduce domestic consumption and to make Members accountable for not implementing important legislation, are responsible for the negative scenario ahead and for missing most of the 2020 goals. The EU needs to sacrifice short-term profits for long term gains by transforming current polluting industries. In the next few years, the EU's environmental policy needs to be stronger in order to achieve the 2030 SDG's and the goals set for 2050. The next decade is decisive for the future of the planet. It's time to go all in on the transition to a green economy and a green, sustainable, ethical lifestyle.

¹⁰⁴ "EU Circular Economy Action Plan", European Commission, accessed May 18, 2020 http://ec.europa.eu/environment/circular-economy/index_en.htm.

¹⁰⁵ European Commission, *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Circular Economy Action Plan*, Brussels, April 2019, SWD(2019) 90, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019SC0090&from=EN>.

¹⁰⁶ "Environmental indicator report 2018. In support to the monitoring of the Seventh Environment Action Programme", EEA, Luxembourg, 2018, <https://www.eea.europa.eu/publications/environmental-indicator-report-2018>.

¹⁰⁷ Circular Economy Action Plan, European Commission, accessed May 18, 2020 https://ec.europa.eu/commission/presscorner/detail/en/fs_20_437.

¹⁰⁸ Sachs, Schmidt-Traub et. al., *The SDG index and dashboards report 2018*.