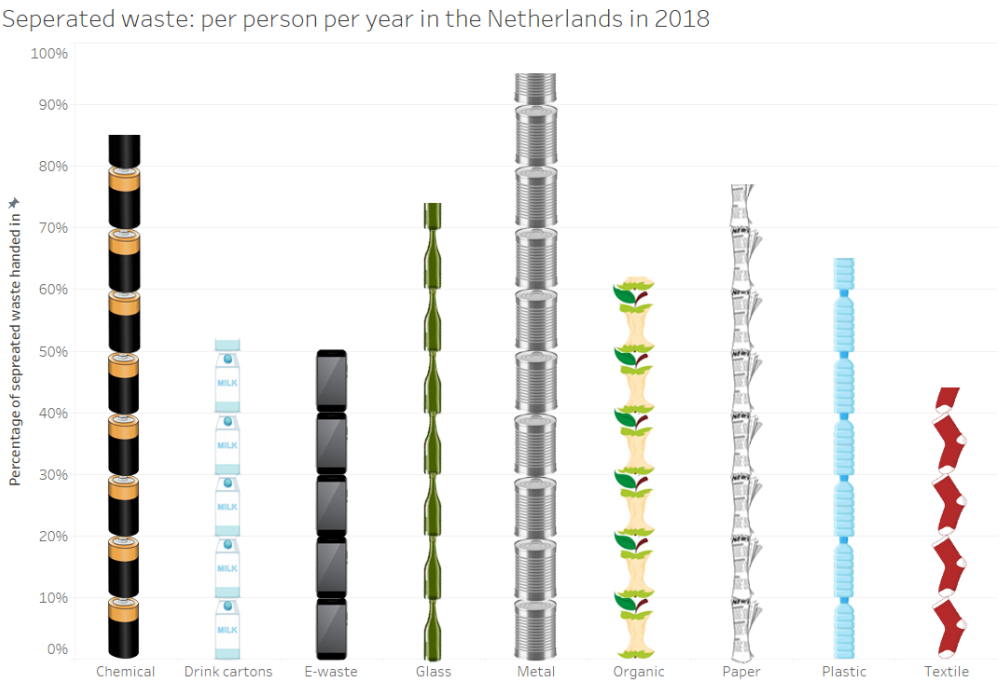
DataViz trash recycling

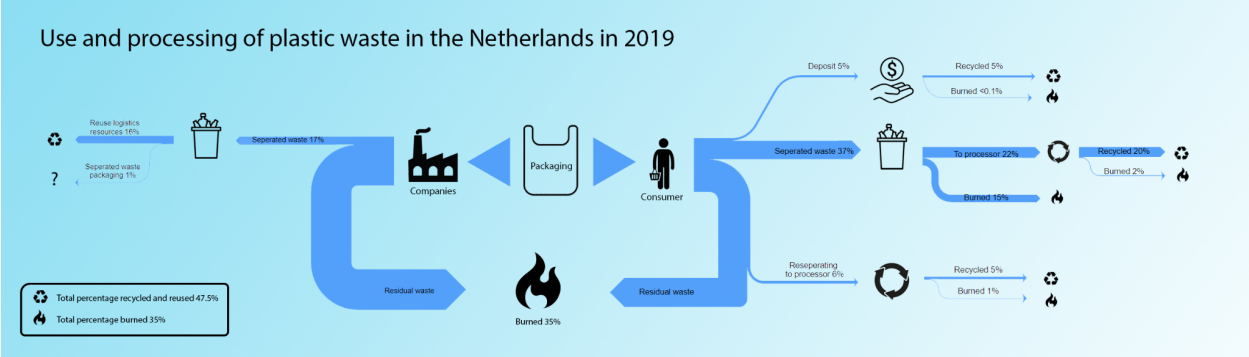
Jonah Sanderman s2334569
Babet ten Hagen s2331772
Ard Kotte s2396696
Karlijn Kole s2163802
Gijs Kampshoff s2307200
08-06-2021



For this visualisation, the bar diagram was made in Tableau. Which was eventually edited in Photoshop.

Data source
https://www.milieucentraal.nl/minder-afval/afval-scheiden/afval-scheiden-cijfers-en-kilo-s/#Een-paar-cijfers-over-afval

Image sources
Chemical: https://pngio.com/PNG/a105430-cartoon-battery-png.html
Drink carton: https://www.freepik.com/vectors/drink-carton
E-waste: https://www.freepik.com/free-vector/black-white-smartphone-mockup_5001191.htm#page=1&query=smartphone&position=28
Glass: https://www.freepik.com/premium-vector/set-different-trash-bin_3956810.htm
Metal: https://www.freepik.com/premium-vector/tin-can-food-package-mockup-set_4305015.htm#page=1&query=can&position=28
Organic: https://www.freepik.com/premium-vector/green-red-apple-core_11415006.htm#page=1&query=cored%20apple&position=25
Paper: http://clipart-library.com/clipart/1384957.htm
Plastic bottle: https://www.dreamstime.com/empty-plastic-bottle-blue-lid-transparent-container-drinking-water-graphic-element-promo-banner-poster-cartoon-style-image117858730
Textile: https://www.shutterstock.com/nl/search/socks+cartoon

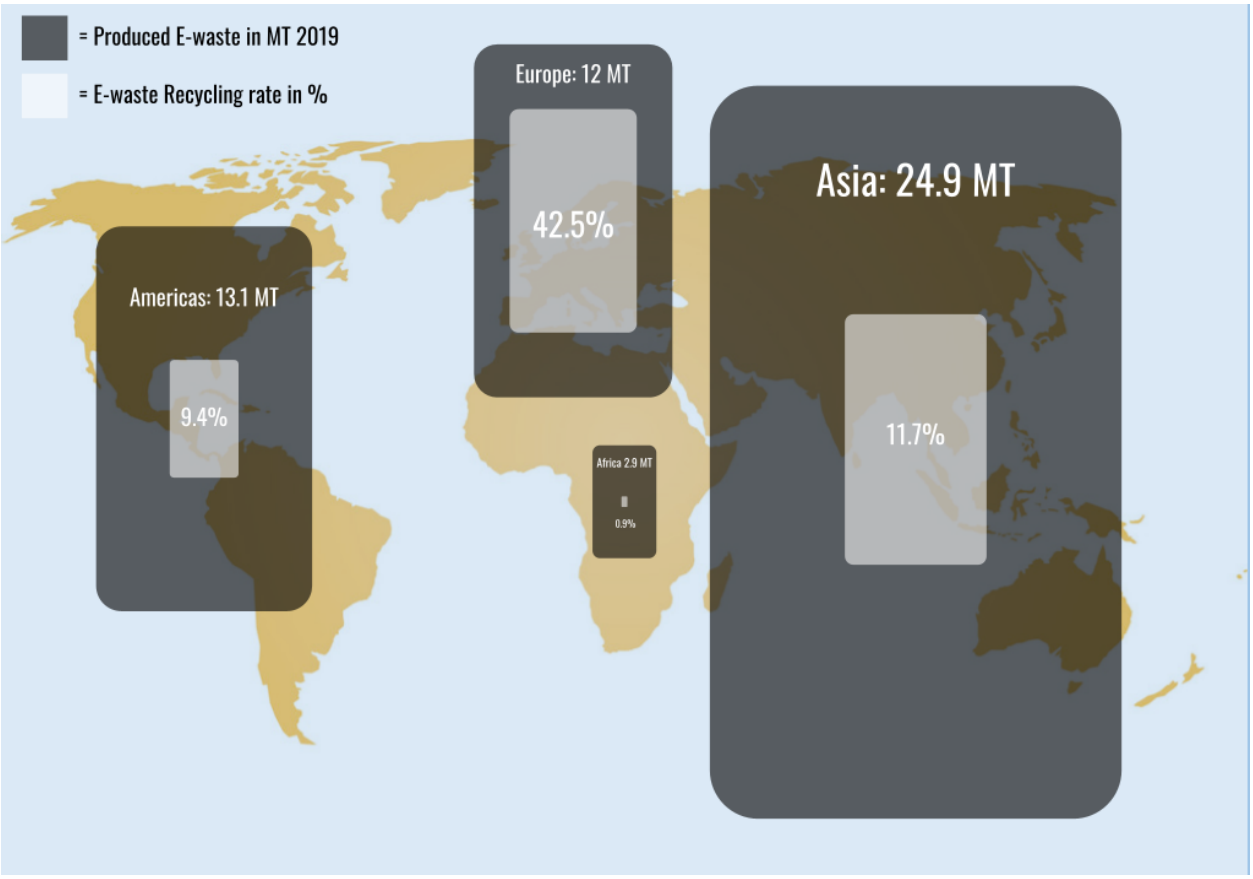


There is a website called Sankey that was used to make the skeleton with the arrows. These arrows were pasted in Photoshop where it became one complete visualisation.

Data source
https://ce.nl/publicaties/plasticgebruik-en-verwerking-van-plastic-afval-in-nederland/

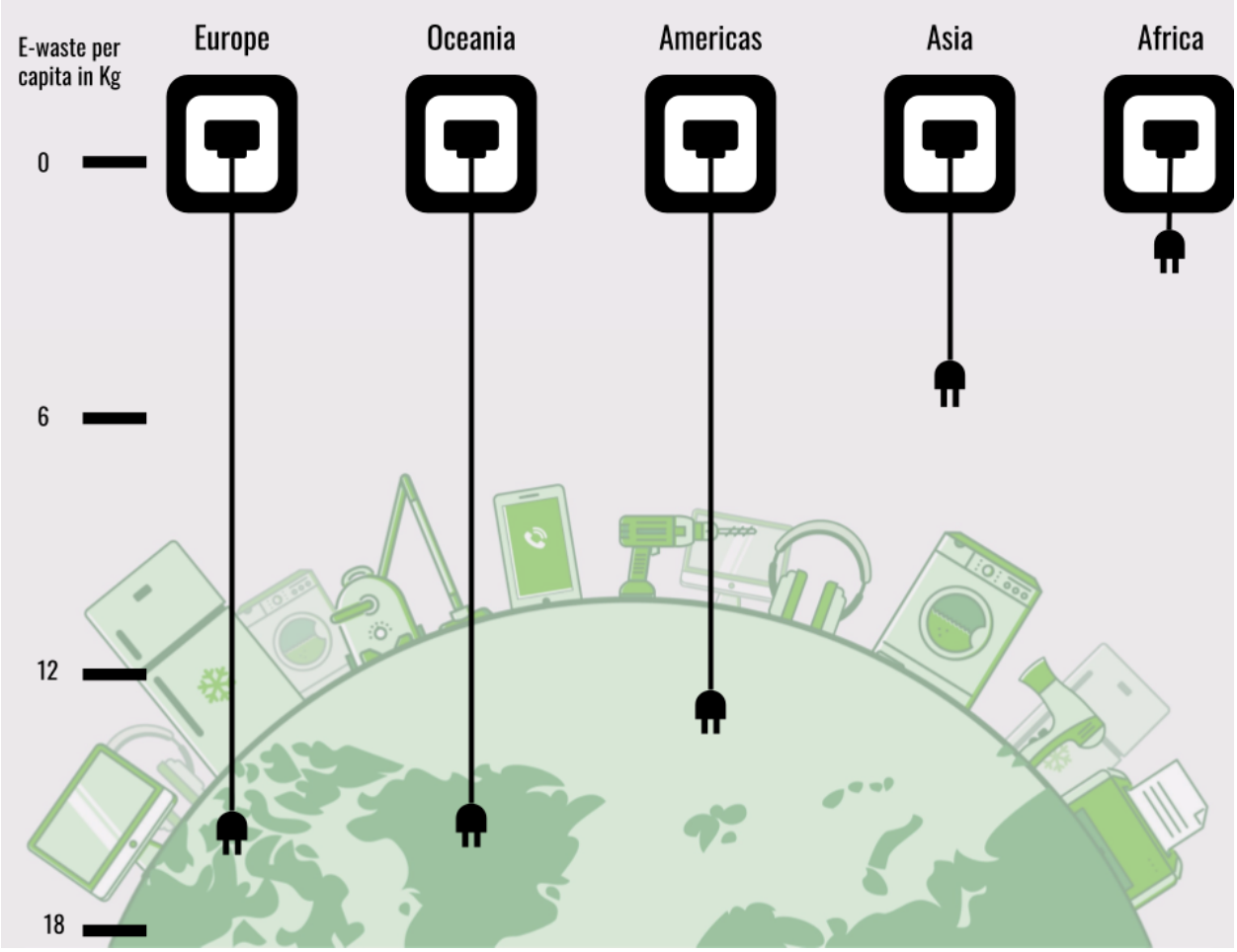
Image sources
Plastic bag:
https://www.iconfinder.com/icons/4117644/accessories_accessory_bag_bags_plastic_bag_shopping_bag_icon
Consumer: https://thenounproject.com/term/consumer/980181/
Deposit: https://www.pinclipart.com/maxpin/iTJwwiJ/
Recycle:
https://www.pinclipart.com/pindetail/iTooxhJ_sign-silhouette-at-getdrawings-recycle-symbol-clipart/
Fire:
https://www.pinclipart.com/pindetail/iTxihio_transparent-fire-clipart-transparent-black-fire-png/
Factory:https://www.pinclipart.com/pindetail/ixiRm_factory-industry-production-icon-icon-industry-vector-clipart/
Separated waste icon: https://iconscout.com/icon/recycle-plastic-waste-2077005

Sankey: https://www.sankeyflowshow.com/app/index.html



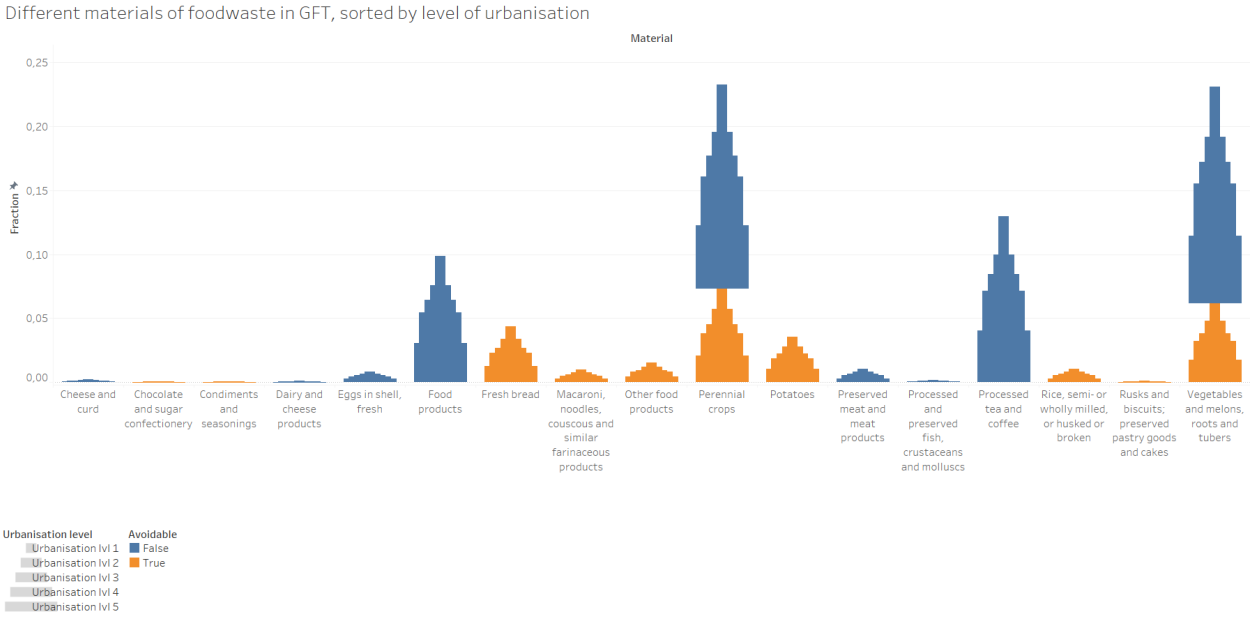
Data source:
http://ewastemonitor.info/wp-content/uploads/2020/12/GEM_2020_def_dec_2020-1.pdf
Background image:
https://cdn4.vectorstock.com/i/1000x1000/44/33/orange-silhouette-world-map-simple-flat-vector-12094433.jpg

The visualisation was made entirely in google drawings. One thing to note is that the continent of Oceania was not incorporated into the visualisation since their e-waste production of 0.7 MT and recycling rate of 8.8% in 2019 was too small to create a significantly visible visualisation.

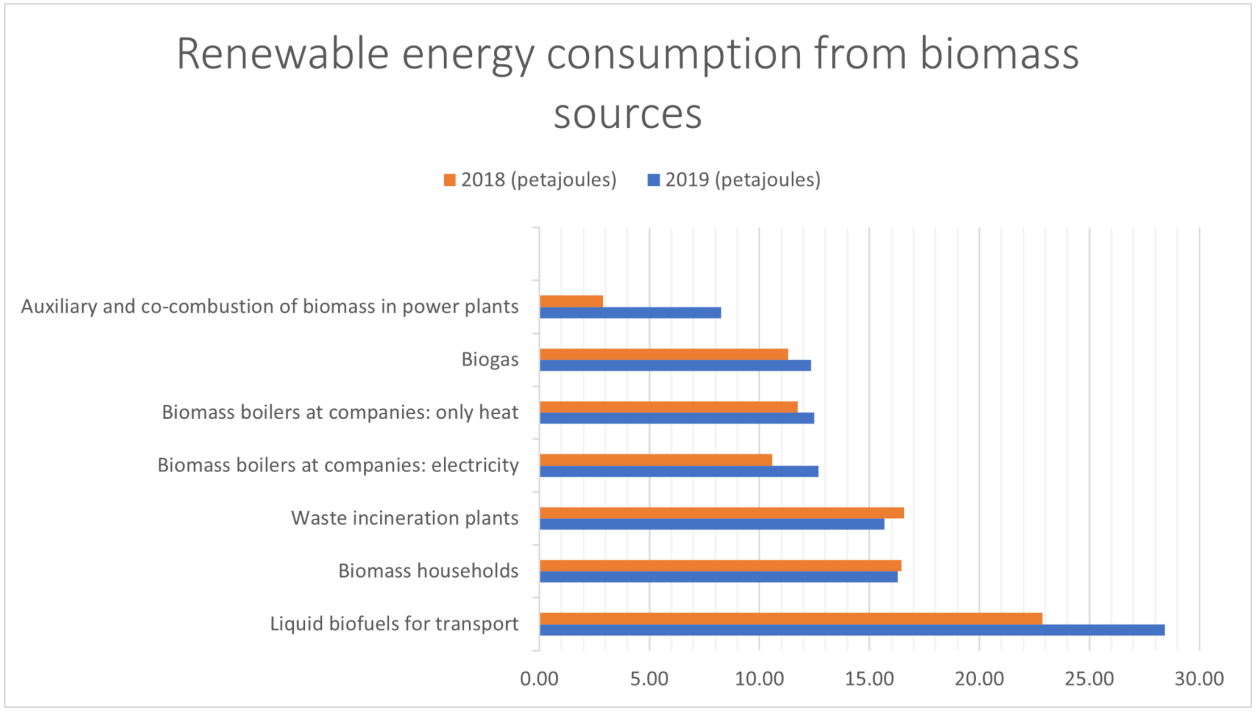


Data source: http://ewastemonitor.info/wp-content/uploads/2020/12/GEM_2020_def_dec_2020-1.pdf
Background image source: https://tcocertified.com/files/2019/10/international-e-waste-day.jpg

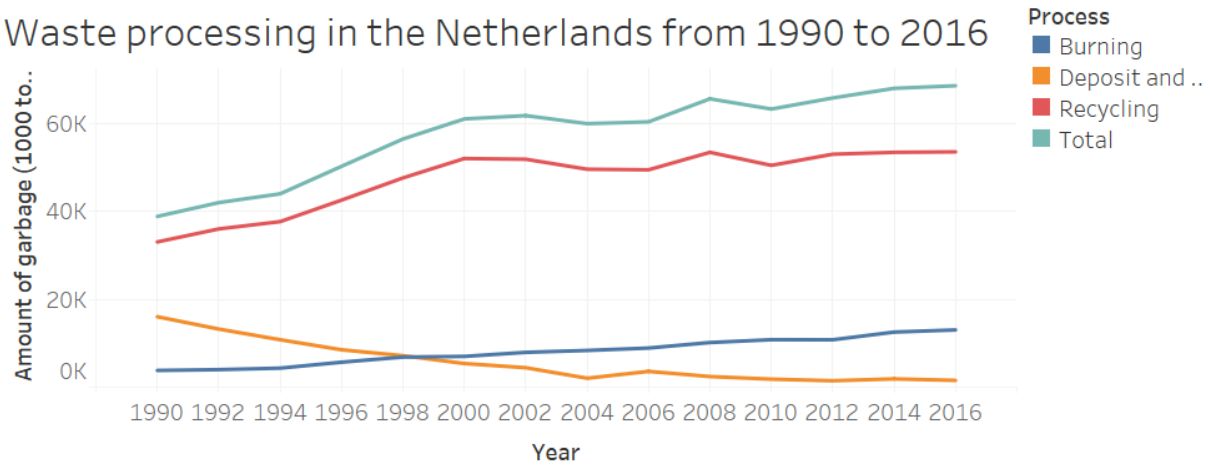
The visualisation was made entirely in google drawings.



Data source:
https://data.4tu.nl/articles/dataset/T3_2_Food_waste_flows_and_stocks_from_households_and_SMEs_to_waste_treatment_plants_in_AMA_using_municipal_waste_collection_system/13302470



Data source:
https://www.cbs.nl/en-gb/news/2021/22/11-percent-of-energy-consumption-from-renewable-sources-in-2020



This visualisation is made in Tableau. It is interactive in a way that you can click on a year in the top visualization and the bottom visualization changes to only show the relative sizes of the processes in that year. Here no year is selected so it shows the average over the years.

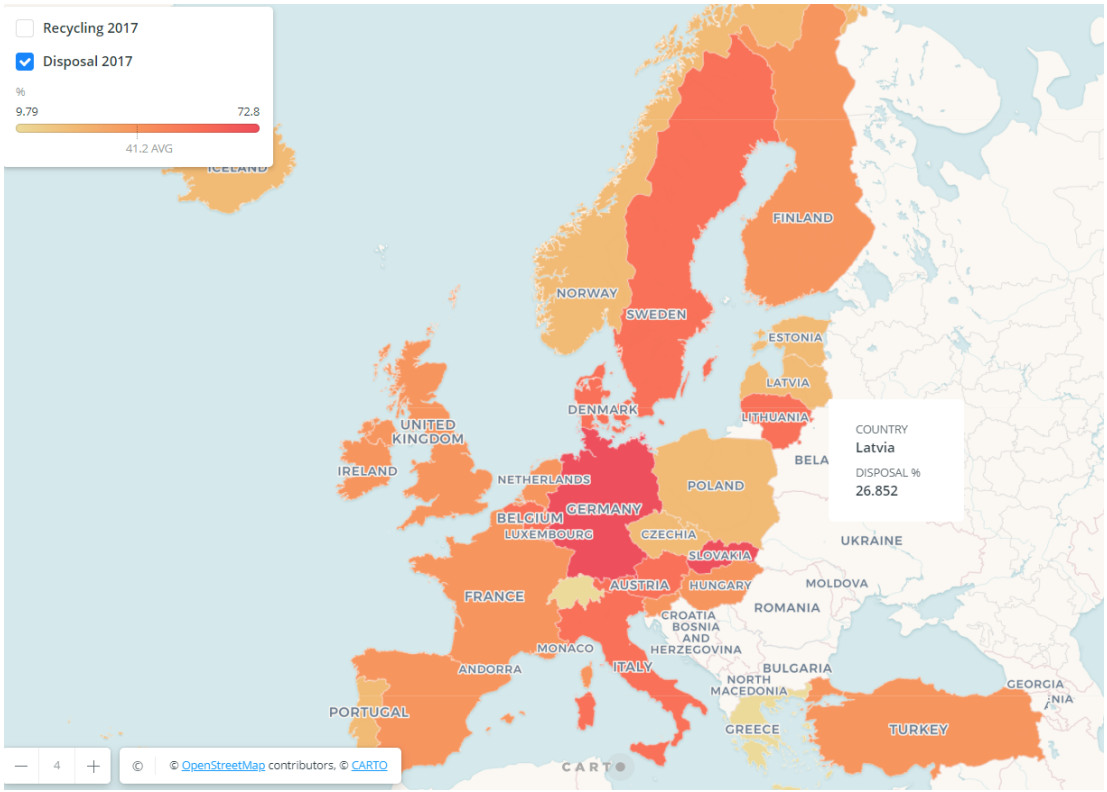
Used sources: https://longreads.cbs.nl/nederland-in-cijfers-2020/hoeveel-recyclen-we/
https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83128NED/table?ts=1622744922213

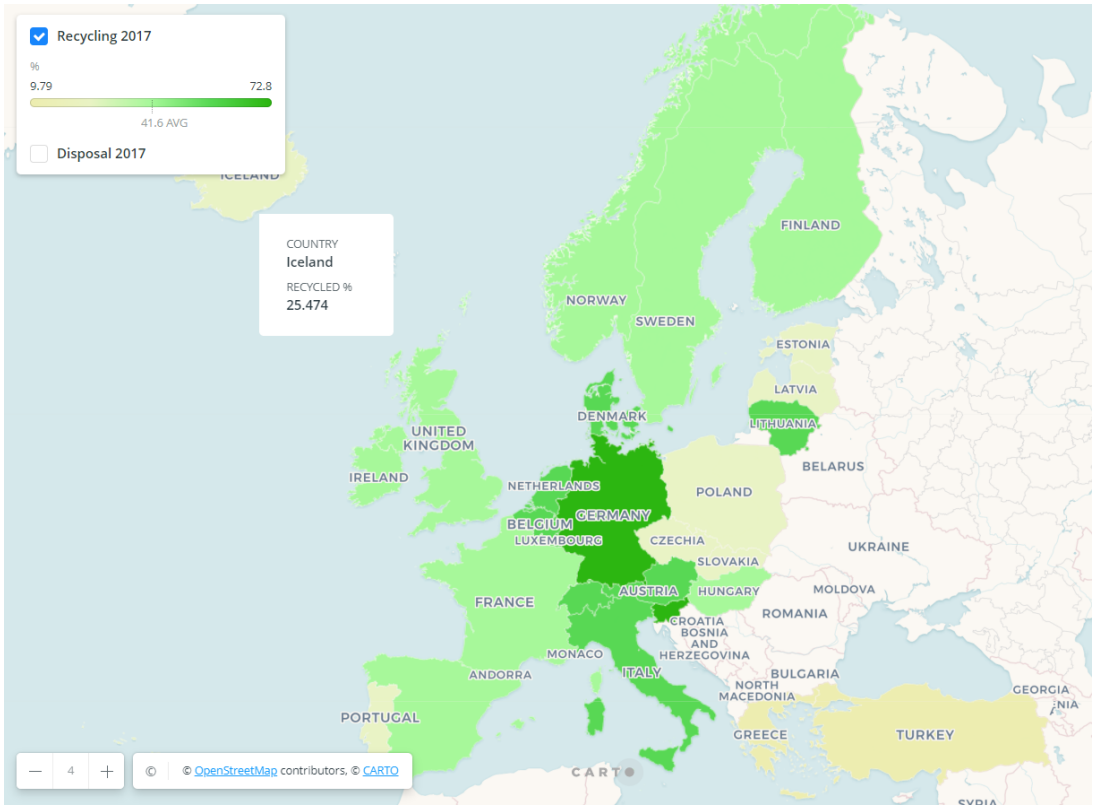
This visualization is made with the use of Tableau and Photoshop.

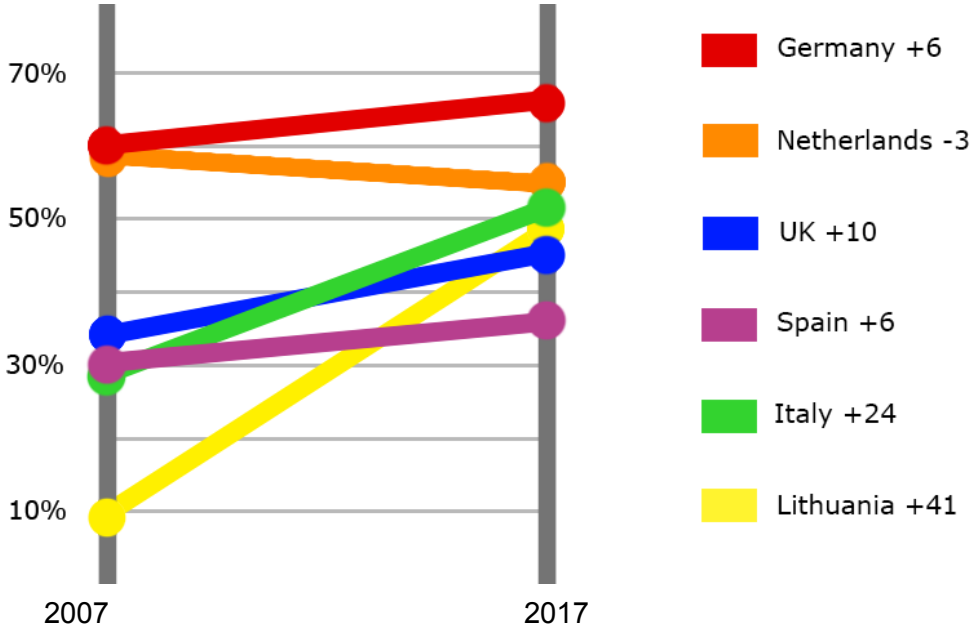
Used sources:
https://afvalfondsverpakkingen.nl/a/i/Afvalfonds-Publieksrapport__2014_definitief.PDF
https://afvalfondsverpakkingen.nl/a/i/AFV_publieksrapport_2015_web_defintief.pdf
https://afvalfondsverpakkingen.nl/a/i/Verpakkingen-in-de-circulaire-economie.pdf
https://afvalfondsverpakkingen.nl/a/i/Recycling-verpakkingen-Nederland-2017.pdf
https://afvalfondsverpakkingen.nl/a/i/Verpakkingen-in-de-circulaire-economie-recycling-verpakkingen-Nederland-2018.pdf
https://afvalfondsverpakkingen.nl/a/i/Verpakkingen-in-de-circulaire-economie-recycling-verpakkingen-Nederland-2019-web.pdf

Image sources:
Glass:
https://www.dreamstime.com/imperia-im-liguria-italy-august-glass-waste-piled-up-junkyard-dedicated-to-recycling-glass-bottles-ready-to-be-recycled-image111732300
Metal:
https://www.recyclingtoday.com/article/scrap-metal-services-contracts-with-aperam-belgium/
Paper:
https://abc7news.com/chinese-recycling-ban-china-recology-berkeley-ecology-center/4832542/
Plastic:
https://www.afrik21.africa/en/mali-invitation-for-projects-on-plastic-bottle-recycling-launched/

Wood:
https://www.google.com/url?sa=i&url=https%3A%2F%2Fcatonrecycling.co.uk%2Fthe-benefits-of-recycling-wood-waste%2F&psig=AOvVaw0CgQTHQXyjbWSVNKE-8ach&ust=1623137345243000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCIiw8fv_hPECFQAAAAAdAAAAABAD


Recycling 2017
Disposal 2017
%
9.79
72.8
41.2 AVG
COUNTRY
Latvia
DISPOSAL %
26.852
FINLAND
NORWAY
SWEDEN
ESTONIA
LATVIA
LITHUANIA
DENMARK
UNITED KINGDOM
IRELAND
NETHERLANDS
POLAND
GERMANY
BELGIUM
LUXEMBOURG
CZECHIA
SLOVAKIA
UKRAINE
AUSTRIA
HUNGARY
MOLDOVA
FRANCE
ROMANIA
CROATIA
BOSNIA AND HERZEGOVINA
MONACO
ANDORRA
ITALY
BULGARIA
NORTH MACEDONIA
GEORGIA
PORTUGAL
GREECE
TURKEY
© OpenStreetMap contributors, © CARTO


Recycling 2017
%
9.79
72.8
41.6 AVG
Disposal 2017
COUNTRY
Iceland
RECYCLED %
25.474
FINLAND
NORWAY
SWEDEN
ESTONIA
LATVIA
DENMARK
LITHUANIA
UNITED KINGDOM
BELARUS
IRELAND
NETHERLANDS
POLAND
GERMANY
BELGIUM
LUXEMBOURG
CZECHIA
UKRAINE
SLOVAKIA
AUSTRIA
HUNGARY
MOLDOVA
FRANCE
ROMANIA
CROATIA
BOSNIA AND HERZEGOVINA
MONACO
ANDORRA
ITALY
BULGARIA
NORTH MACEDONIA
GEORGIA
PORTUGAL
GREECE
TURKEY
© OpenStreetMap contributors, © CARTO



Description:
First two maps of Europe are made in Carto and are interactive. You can toggle between the maps and hover over the countries to check the percentages. The percentages are calculated by disposal or recycling divided by the total amount of waste. Disposal includes landfill and incineration. Recycling includes recycling of materials and composting. The slope chart shows the rate of change of recycling over 10 years of the biggest countries and Lithuania, since this country had the biggest increment.

Program: Carto, Adobe Illustrate
Sources:
https://stats.oecd.org/Index.aspx?DataSetCode=MUNW
https://www.oecd.org/environment/environment-at-a-glance/Circular-Economy-Waste-Materials-Archive-March-2020.pdf