BLOOMINGTON-NORMAL MLRTP 2050

Appendix Seven | Emissions Resulting from Transportation in 2019

McLEAN COUNTY REGIONAL PLANNING COMMISSION | 2022

MCRPC
McLean County
Regional Planning Commission

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Context for Transportation and Greenhouse Gas Emissions

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Among the issues arising from the areas of focus reviewed in Chapter 4, comments from the public regarding the relationship between transportation systems and air quality seemed more contentious than most.

Before the concept of global climate change entered the public consciousness, there was significant concern about the impact of air pollution on the quality of life across the United States. This was relevant especially for large, heavily industrialized cities in the Northeast and the Midwest. In many instances, the cities with high levels of air pollution also suffered from poor water quality, partly attributable to uncontrolled disposal of toxic products and industrial waste on land and in the atmosphere and waterways.

In the 1970s, the clear harm to people and the environment led to the and the environmental awareness it helped to spark led to significant changes in the law to reduce these threats to the environment. Beginning with the creation of the Environmental Protection Agency in late 1970, legislative initiatives led to the Clean Air Act, the Water Quality Improvement Act, the Endangered Species Act, the Toxic Substances Control Act and the Surface Mining Control and Reclamation Act, and later legislation to expand the scope of environmental protection. The decade ended with the creation of a federal fund to clean up sites with toxic and potentially deadly pollution, resulting in the catalogue of Superfund sites across the country.

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One result of the focus on air quality was ongoing efforts to regulate emissions from motor vehicles with internal combustion engines fueled by petroleum products. Although the benefits of this regulation and similar policies with respect to industrial air pollution became clear fairly quickly, there continues to be skepticism about the need for the controls. What follows is a group of charts illustrating both the role of transportation in generating greenhouse gas pollutants, and the degree to which transportation activity in the United States creates a higher proportion of greenhouse gas emissions that exists in other countries.

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The EPA illustration below shows the large share of emissions attributable to transportation systems as measured in 2020. Electrical power generation and industrial uses each account for about a quarter of greenhouse gas emissions. The remaining categories, agricultural, commercial and residential,

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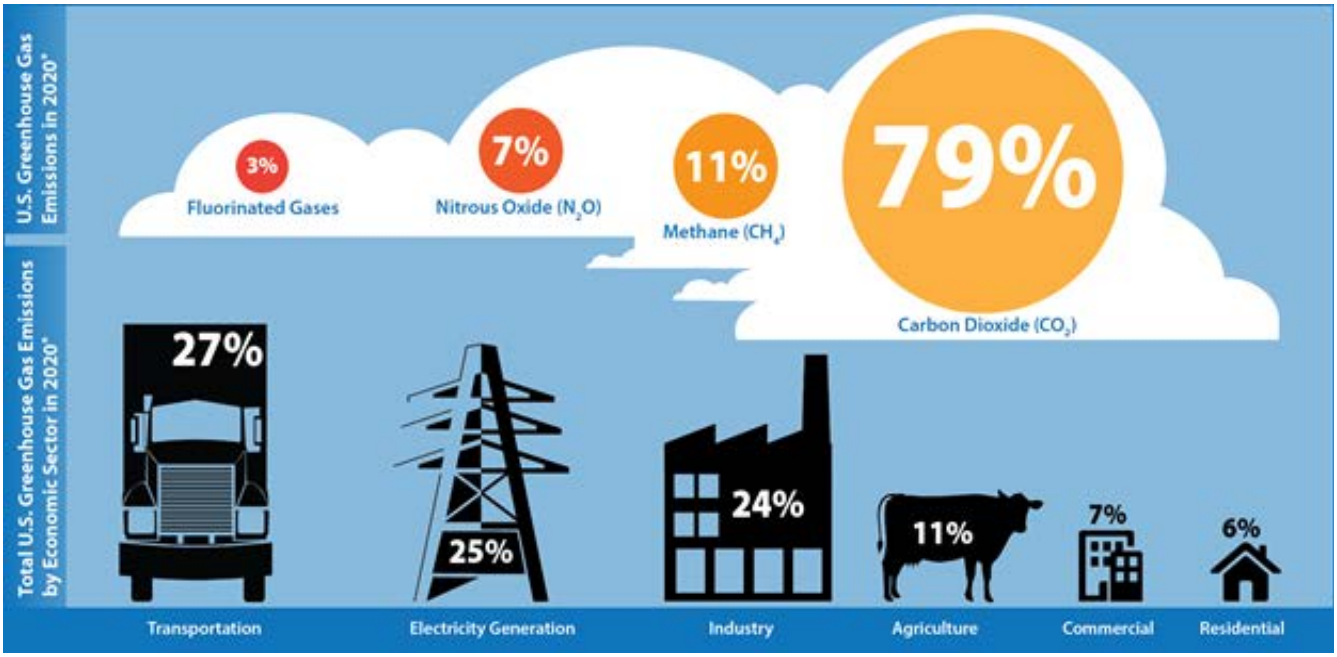

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US Greenhouse Gas Emissions by Economic Sector in 2020
Source: https://cfpub.epa.gov/ghgdata/inventoryexplorer/

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together produce less than a quarter of national emissions.
The disproportionate degree to which transportation-based emissions in the United States is illustrated in the charts below. As shown symbolically in the world map, emissions based in transportation are significantly larger than in other large industrialized counties.

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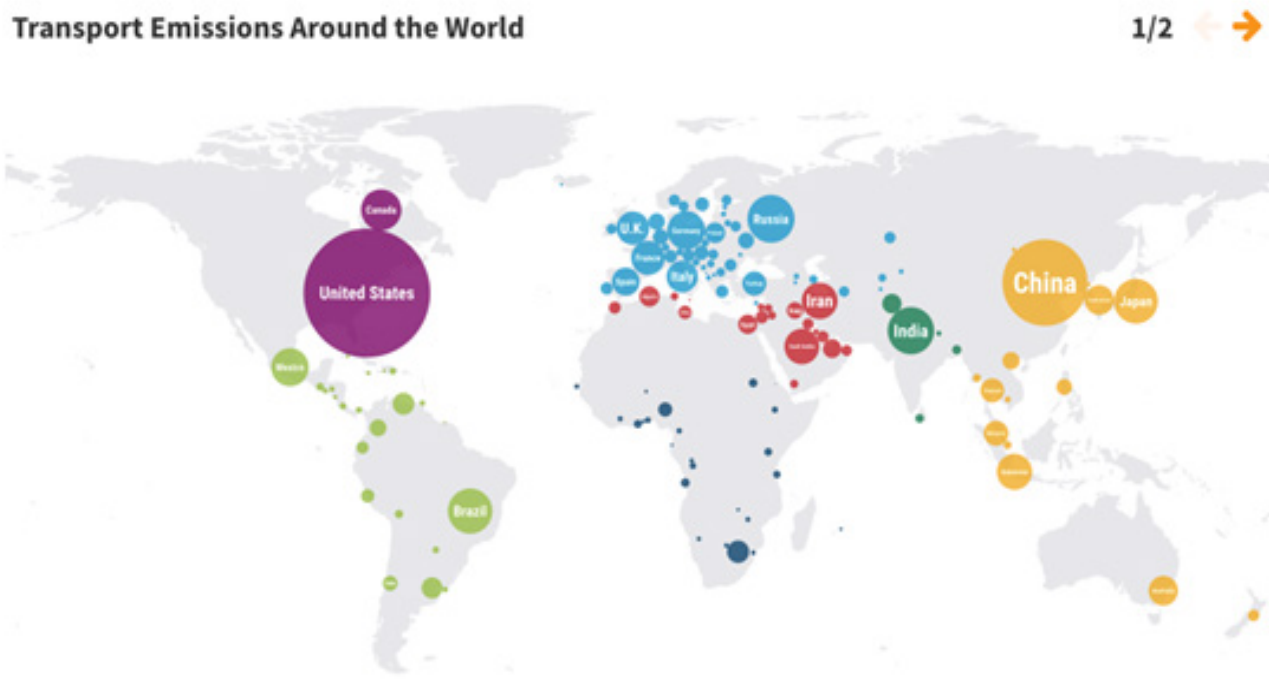

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Source: https://wri-sites.s3.us-east-1.amazonaws.com/climatewatch.org/www.climatewatch.org/climate-watch/key_visualizations/download/download_8_transport_emissions_10162019.png

Transportation as a Generator - World Resources Institute GG Emissions Charts. In 2018, the global share of emissions attributed to transportation was 14.3%.

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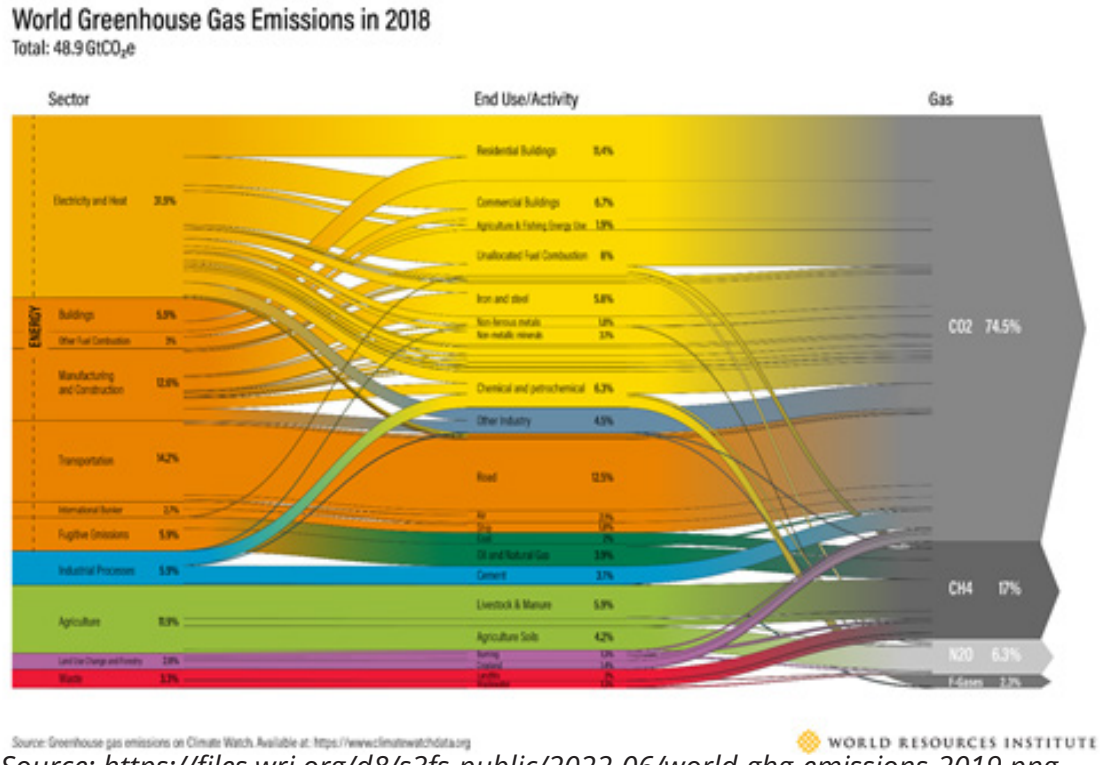

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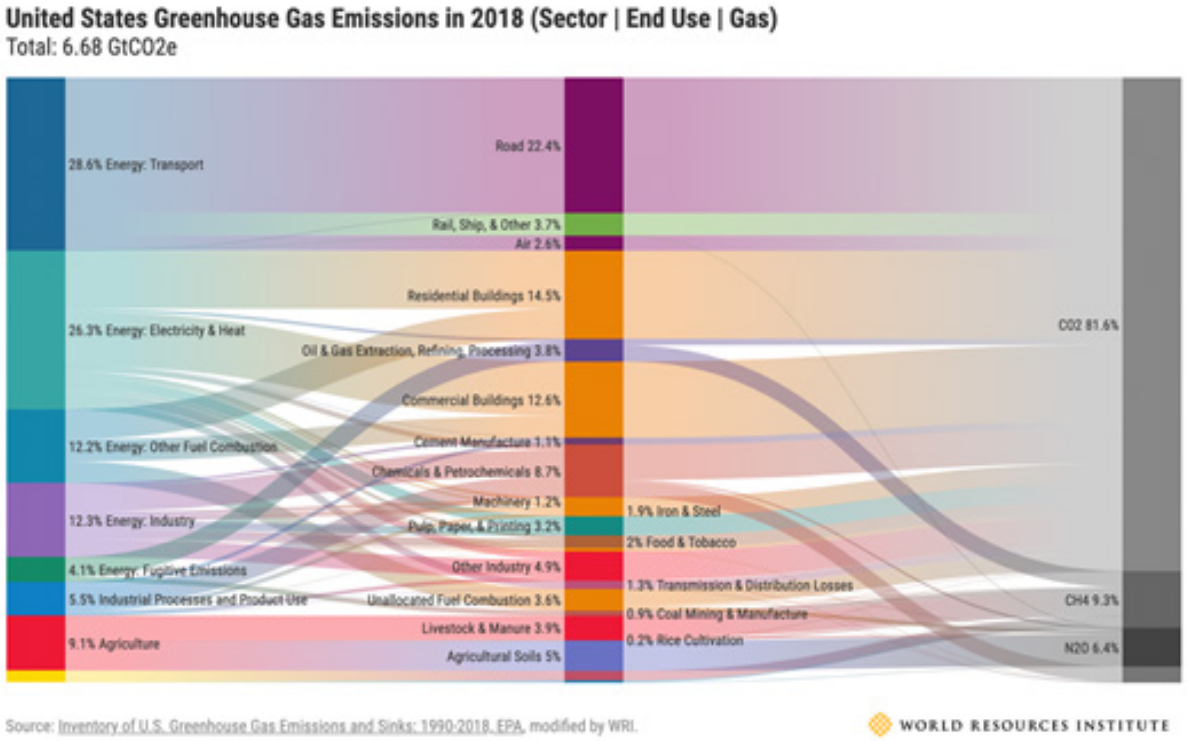
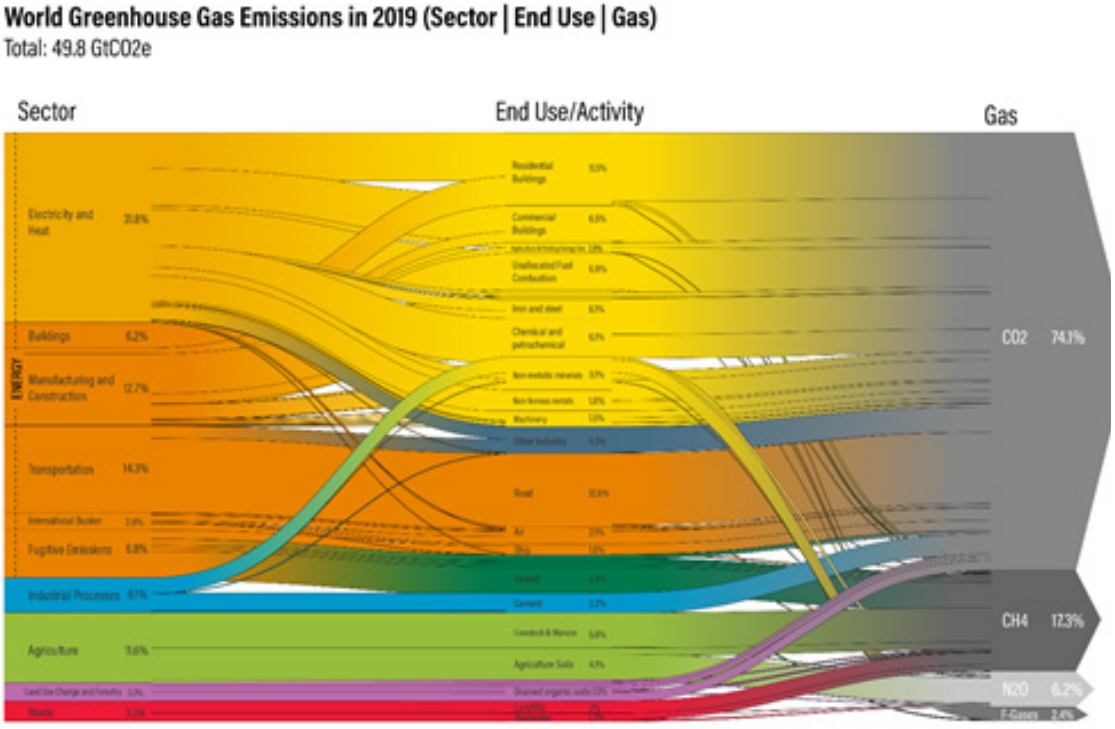
Source: https://files.wri.org/d8/s3fs-public/2022-06/world-ghg-emissions-2019.png

Also in 2018, transportation accounted for 28.8% of emissions in the United States .



Source: https://www.climatewatchdata.org/key-visualizations?visualization=9

The global share of emissions in 2019 was increased by one-tenth of a percent.



Source: https://www.climatewatchdata.org/key-visualizations?visualization=7