

New Jersey's Climate Initiatives

A Middle School Lesson

Hank Bitten, NJCSS Executive Director

New Jersey has an ambitious master plan to reduce greenhouse gas emissions. Our federal government has announced that it will end its support for the Paris Climate Agreement. The future of renewable energy and carbon emissions reductions will likely be based on the policies and actions of state and local governments, businesses, and individuals.

Between 2006 and 2020, New Jersey reduced its greenhouse gas emissions by approximately 25%. **New Jersey also exceeded the 2020 greenhouse gas reduction goal – to reduce emissions to 1990 levels – by 20.5 MMT, or 18%.**

Meeting the ambitious goals of reducing emissions 50% by 2030 and 80% by 2050 will require all economic sectors, levels of government, companies, communities, and individuals to accept and adopt changes that will reduce the adverse effects of climate change.

This activity presents five problem areas with solutions to be considered. These five areas are Food Waste, Electric Power, Transportation, Industrial Manufacturing, and Clothing Waste. The lesson strategy is for students to be placed in groups as investigation teams who will analyze the problem, study local and state solutions, and make a presentation, engage in a debate, or publish a video or article.

Essential Questions:

1. What are the biggest contributors to carbon emissions (greenhouse gases) in New Jersey?
2. How effective are the current solutions in reducing carbon emissions (greenhouse gases) in our state?

Food Waste

Essential Questions:

1. Are there incentives for schools, communities, or New Jersey to consider reducing food waste?
2. Should the priority for reducing greenhouse gas emissions from food primarily focus on production, distribution, or consumption?
3. Is food waste an area that should be considered as one of the top three causes to address in the next five years?

“Not only is food waste the single largest component of the municipal solid waste stream in New Jersey and a major contributor to greenhouse gas emissions, it presents us with a multitude of societal challenges that must be addressed if we are to achieve our goals of a fairer and more sustainable Garden State.” Given the vast resources required for food production, wasted food also means wasted land, water, energy, and labor, with serious economic repercussions. The combined toll of food loss and waste on the global economy is estimated to be around USD 1 trillion annually.”

[Food Waste and its Links to Greenhouse Gases and Climate Change](#) (US Department of Agriculture)

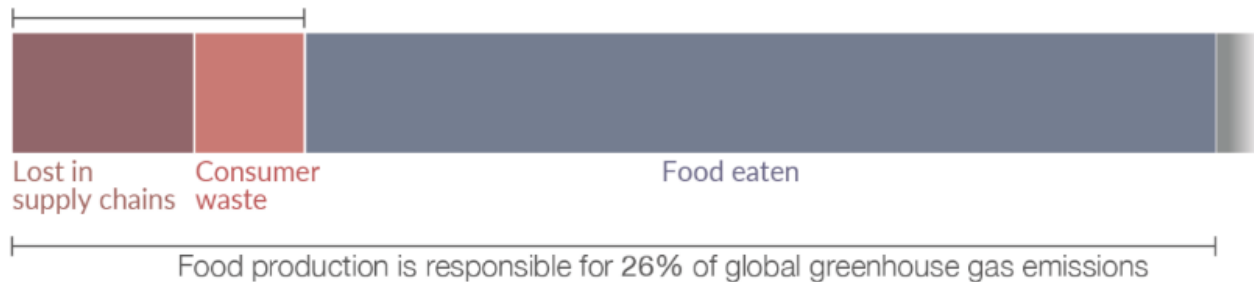
Student Activity #1:

Analyze the three images below regarding greenhouse gas emissions from food waste and food production. Identify five causes of how our food contributes to greenhouse gas emissions and climate change.

6% of global greenhouse gas emissions come from food losses and waste

Our World
in Data

Emissions from food that is never eaten accounts for 6% of total emissions



Note: One-quarter of food emissions comes from food that is never eaten: 15% of food emissions from food lost in supply chains; and 9% from consumer waste.

Data source: Joseph Poore & Thomas Nemecek (2018). Reducing food's environmental impacts through producers and consumers. *Science*.

[OurWorldinData.org](https://www.ourworldindata.org) - Research and data to make progress against the world's largest problems.

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Since only 6% of greenhouse gases are from food waste and food spoiled and discarded during the transportation from the farm to the factory to the supermarket or restaurant, what is the major source of the remaining 20% of greenhouse gas emissions in the food production and distribution process?

As shown in Figure 2-1, primary production is responsible for the widest range of environmental inputs among the stages of the U.S. cradle-to-consumer food supply chain. The use of land and the application of pesticides and fertilizers occur chiefly during primary production, while the use of water and energy and the emissions of greenhouse gases occur all along the food supply chain (Crippa et al., 2021; Canning et al., 2020).

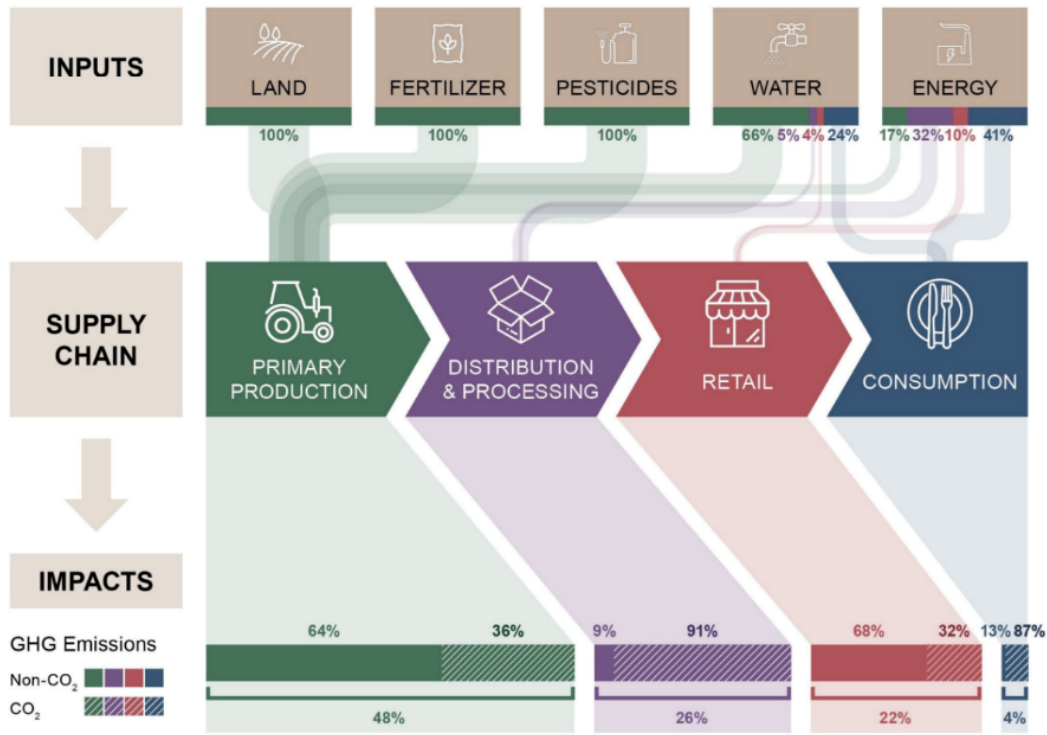
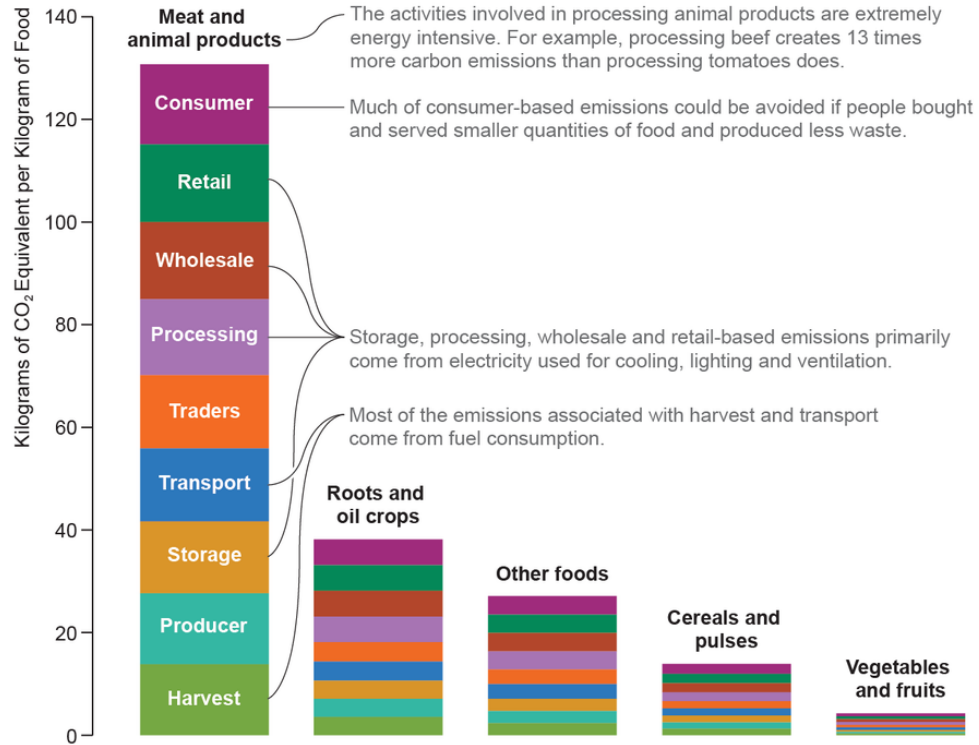


FIGURE 2-1. ENVIRONMENTAL FOOTPRINT OF THE U.S. CRADLE-TO-CONSUMER FOOD SUPPLY CHAIN

This figure portrays the use of five major inputs and the emission of greenhouse gases, by supply chain stage.
 Data Source: Canning et al. (2020); Crippa et al. (2021)

Greenhouse Gas Emissions by Food Type

The chart below shows how much greenhouse gas is produced on average during each step of the food supply chain for each category of food commodity. These values apply to the food supply chain as a whole and are not specific to food loss and waste.



Although 6% of emissions from food waste may seem like a small number, why is it a highly significant amount of greenhouse gas emissions?

How Wasted Food Turns into Huge Amounts of Greenhouse Gas



Student Activity #2:

Analyze the places below where the United States imports food from. Identify the places where the United States imports coffee, beef, rice, fruit, and other products. Read these articles to take a deeper look into the relationship between food and global warming in the production of coffee and rice.

Coffee

Rice

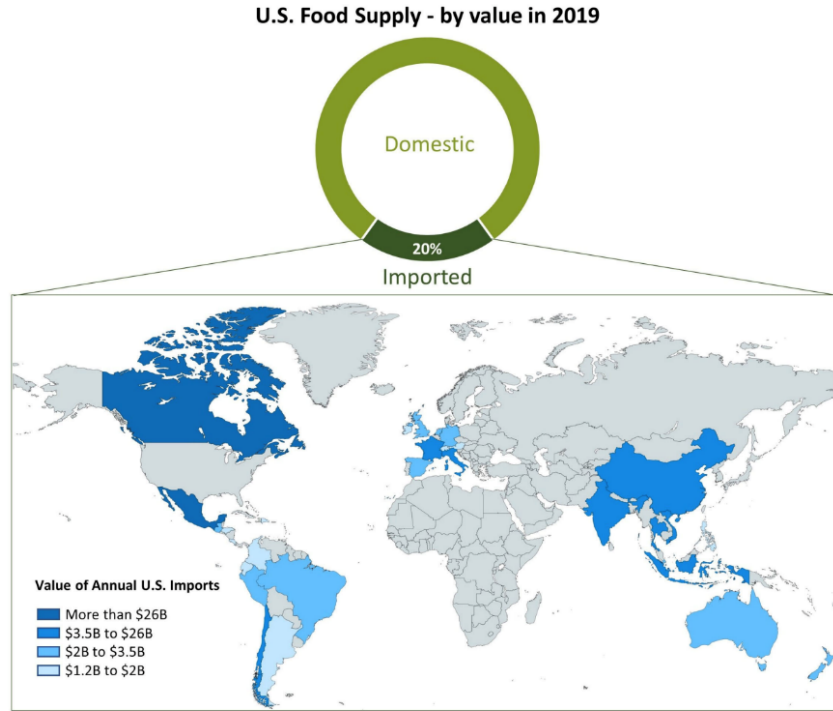


FIGURE 2-2. IMPORTS TO U.S. FOOD SUPPLY

Food imports to the United States are predominantly from Mexico and Canada, followed by France, Italy, Chile, China, India, and Indonesia, in order of value of imported food. Groupings in figure correspond to the 99th, 95th, 90th, and 85th percentiles across 201 importing countries.
Data Source: CRS (2020); World Bank (2021)

New Jersey’s commitment to reducing food waste can have a substantial impact on this sector’s greenhouse gas emissions. Specifically, swift action to halve food waste by 2030 (or approximately 742,038 tons) will achieve cumulative reductions of up to 2.1 MMT CO₂e by 2030 and up to 16.0 MMT CO₂e by 2050. To initiate this rapid abatement NJDEP has identified 13 critical enabling actions, ranging from updating waste regulations to raising public awareness through educational efforts. This goal has been codified into law in the form of the Food Waste Reduction Act (P.L. 2017 Chapter 136).

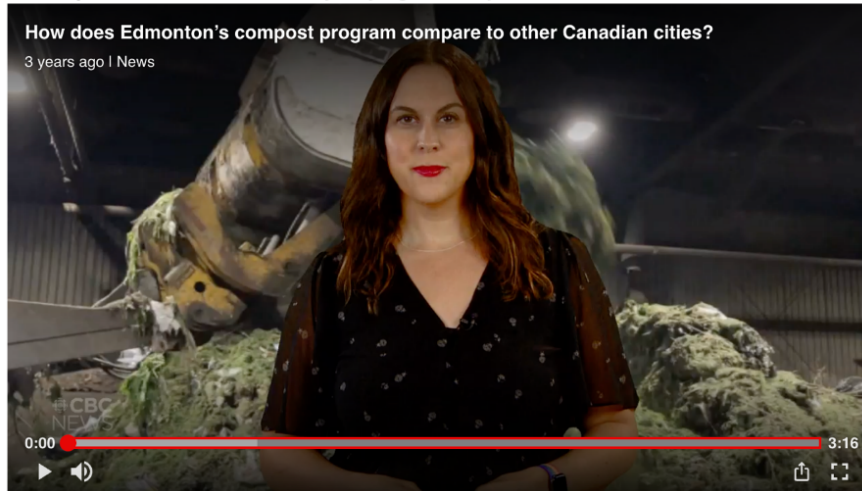
Table 3.4.1.: Priority Measure 10 Greenhouse Gas Reduction Estimates

	<i>Near Term by 2030</i>	<i>Long Term by 2050</i>
	Cumulative Reduction	Cumulative Reduction
<i>Estimated GHG reductions (MMT CO₂e, GWP₁₀₀)</i>	2.1	16.0

Solutions

1. [Video on Edmonton Canada's Plan](#)

WATCH | How does Edmonton's compost program compare to other Canadian cities?



Edmonton's green bins are only a year old, making the city a relative newbie to composting in Canada. Who came first, and what are the common lessons learned? Here's Emily Fitzpatrick with more.

2. [Presentation by Mayor of Glen Ridge](#)

3. [Food Matters Annual Report](#) (NRDC)

Student Activity #3:

Discuss in small groups a plan to reduce food waste in your home and school. Which of the three solutions above are the most practical ones that your class and you will try to implement? Develop a timeline and budget to implement the solution you would like to implement.

Electric Power

Essential Questions:

1. How will the installation of electric heat pumps in homes affect future greenhouse gas emissions?
2. What incentives should New Jersey consider increasing solar energy and solar farms?
3. Is electric power generation the most difficult cause of greenhouse gas emissions to address?

[Solar Farm Leases](#)

[Map of Solar Farms in New Jersey](#)

[Solar Energy Industries Association](#)

[Community Solar Farm Organization](#)

[The Drone Life](#)

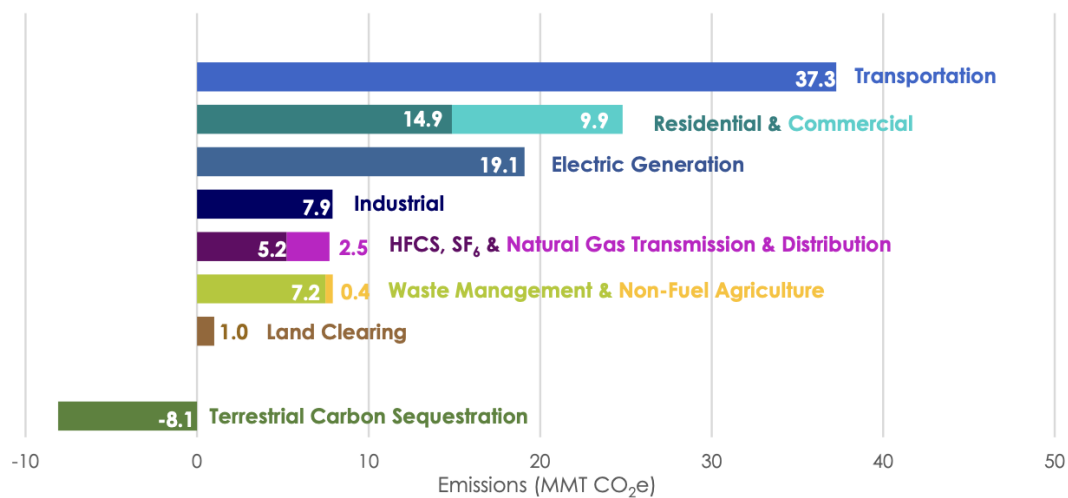
[NJ Department of Environmental Protection Solar Siting Report \(2024\)](#)

[Berkeley Township Solar Farm \(Video\)](#)

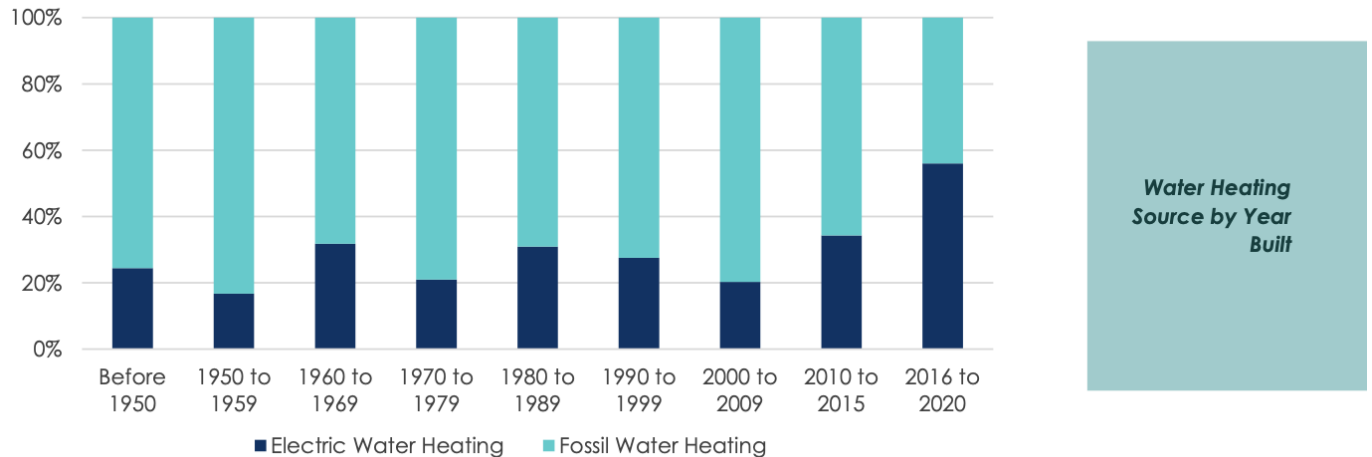
In 2023, total annual U.S. [net electricity generation](#) by utility-scale electric power plants (plants with at least one megawatt of electricity generation capacity) was about 4.18 trillion kilowatthours (kWh) from all energy sources. **U.S. net generation resulted in about 1.53 billion metric tons—1.69 billion [short tons](#)—of carbon dioxide (CO₂) emissions, which is about 0.81 pounds of CO₂ emissions per kWh.** In 2022, the U.S. electric power industry accounted for about **33% of total U.S. energy-related CO₂ emissions.**

New Jersey's electric power generation emissions are a small percentage of the national total. In 2021, New Jersey's gross emissions from electric power generation were 105.7 million metric tons of carbon dioxide equivalent (MMT CO₂e). This was 1.7% of the national emissions and 0.3% of the world's emissions. New Jersey's net emissions have dropped 13% from 112.6 MMT CO₂e in 1990 to 97.6 MMT CO₂e in 2021. [Source](#)

Figure 2.2: New Jersey 2021 GHG Emissions (GWP₁₀₀)



New Jersey homeowners are installing electric heat pumps for hot water instead of the traditional 50-gallon water heater that uses natural gas which produces methane and carbon emissions.



Student Activity #4:

Electric Generation of power is the third largest contributor to greenhouse gas emissions in New Jersey after transportation and emissions produced from heating buildings and homes. Identify the location of the power plant for electric generation that provides electricity to your community or county and the fuel it uses to generate electricity.

How does methane from natural gas contribute to climate change? [Source](#)

How does nuclear power affect the environment? [Source](#)

What percentage of electricity is from solar power or renewable energy in your county? [Source](#)

[Interactive Map of Solar Farms in New Jersey](#)

[Map of Electric Generation Plants in New Jersey.](#)

[Map of Power Plants and Energy Source in New Jersey](#)

- *In 2023, nuclear power provided 42% of New Jersey's electricity.*
- *In 2023, natural gas provided 49% of New Jersey's electricity.*
- *In 2024, solar power provided 8% of New Jersey's electricity.*
- *The Clean Energy Act of 2018 mandates that 7,500 megawatts (MW) of offshore wind electric generation capacity come online by 2035.*

Solutions

In the fall of 2020, New Jersey issued the [Global Warming Response Act 80x50 Report](#), which outlined pathways and offers recommendations to achieving the state’s greenhouse gas reduction goal. This report, in tandem with the [Energy Master Plan](#), will guide the state’s work in decarbonizing its economy.

Student Activity #5:

In 2024, New Jersey saw nearly 400 megawatts of solar capacity installed, with a robust pipeline of grid-scale, community solar, along with the Dual-Use Agrivoltaics Pilot Program and rooftop solar yet to be developed. The considerable growth in solar helps New Jersey achieve Governor Murphy's Executive Order 315 goals, which sets the goal of 100% of the electricity sold in the State to be derived from clean sources of electricity by January 1, 2035.

New Jersey's current installed solar capacity comprises:

- ***80.3% Net-Metered Solar: Rooftop systems on homes and businesses powering local needs.***
- ***16.4% Grid-Supply Solar: Larger installations supplying power directly to the grid.***
- ***3.3% Community Solar: Providing equitable access to clean energy for underserved communities.***

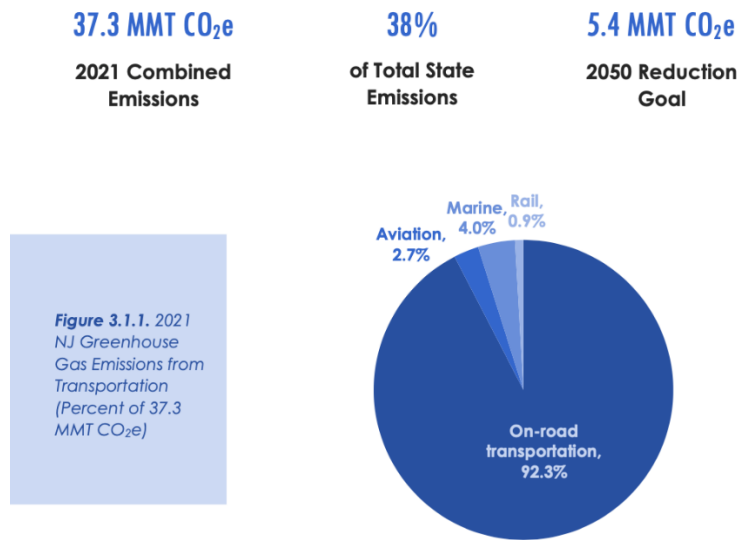
Solar energy supports approximately 7,000 jobs across New Jersey, driving economic development and helping to reduce greenhouse gas emissions and energy costs for residents and businesses. [Source](#)

Transportation

Essential Questions:

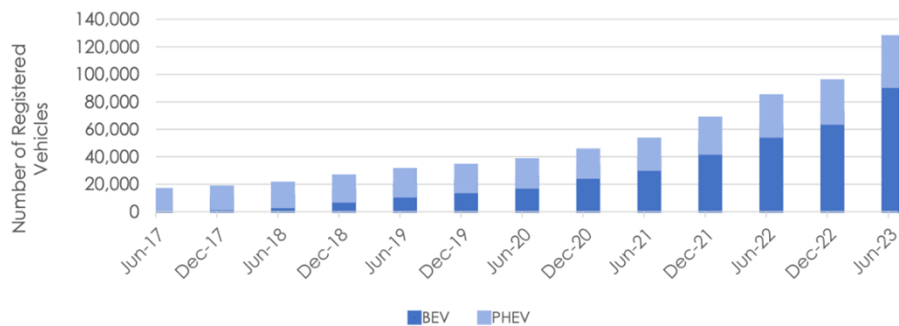
1. What should be the first goal in reducing carbon emissions in the Transportation Sector?
2. How does the cost of a new electric vehicle compare with the cost of a traditional gasoline powered vehicle?
3. Is reducing greenhouse gas emissions in the transportation sector one of the areas that New Jersey will likely achieve first?

According to the information below, how significant is transportation (auto, commercial, bus) as a contributor to greenhouse gas emissions and climate change?



According to the graph below, why do you think electric vehicle registrations have doubled in the past two years? (2021-2023)

Figure 3.1.2. Semi-annual Electric Vehicle Registrations in New Jersey (all vehicle classes)



Student Activity #6:

How can your community increase the number of Electric Vehicles over the next five years? Identify your goal as a percentage of electric vehicles compared to gas powered vehicles, number and location of charging stations needed, conduct interviews with residents, discuss plans and incentives with local car dealerships, investigate grants and financial incentives to help with costs.

Number of Electric Buses

[Zero Emissions Bus Project in New Jersey](#)

[Electric School Bus Initiative in New Jersey](#)

[The 5 Cities in the United States with the most Electric Buses](#)

Number of Electric Vehicle Registrations

[Interactive NJ Map of Electric Vehicle Registrations and Charging Stations](#)

[Electric Vehicles Spreadsheet by Municipality in NJ](#)

[Data About Electric Vehicles in New Jersey \(Charging Stations, Registered Vehicles, etc.\)](#)

[Installation Costs of EV Chargers](#)

Number of Electric Trains

[NJ State Rail Plan](#)

[Viability of Electric Trains in New Jersey](#)

Solutions:

Student Activity #7:

- 1. Identify commercial businesses in your community using vans, small, big box trucks, and tractor trailers.**
- 2. Prepare a report for one or more local commercial businesses regarding the cost of a new electric vehicle (van, Big Box Truck, etc.) and the cost of a new gas-powered vehicle of similar size. [Source](#)**
- 3. Identify charging stations close to the area where the vans or trucks are parked and identify the cost of a new charging station at the commercial site.**
- 4. Identify a commercial business in your area that is using electric vehicles and write them a Thank You letter or provide another form of appreciation.**
- 5. Prepare a debate or presentation regarding using taxes for solutions to reduce carbon emissions in the transportation sector.**

[States with Most Electric Vehicles Registered](#)

[New Jersey Hits Milestone of Electric Vehicle Registrations \(2024\)](#)

[New Jersey Dealers Push Back on Rules for Electric Trucks \(NPR\)](#)

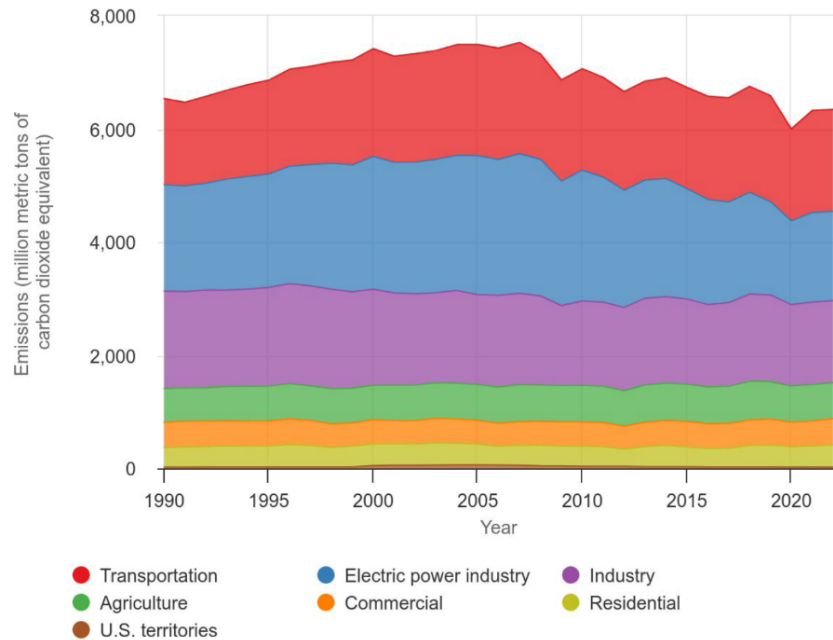
[New Jersey Adopts Rule to Phase in Electric Heavy Trucks](#)

Industry (Manufacturing)

Essential Questions:

1. How do methane gas emissions affect climate change differently than carbon dioxide emissions?
2. How can individuals and households have the greatest impact on reducing greenhouse gas emissions in the short term?

U.S. Greenhouse Gas Emissions by Economic Sector, 1990–2022



Source: U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022. <https://www.epa.gov/ghgemissions/inventory-of-us-greenhouse-gas-emissions-and-sinks>

New Jersey is making significant progress in reducing carbon greenhouse gas emissions from industrial production and the generation of electricity. New Jersey produces less than 2% of greenhouse gases for the total emissions in the United States and we produce less than 0.5% of greenhouse gases of all countries. A significant portion of our energy used in homes businesses, and industry is from natural gas. Natural gas produces methane which is another contributor to global warming and climate change.

Natural gas flaring produces CO₂, carbon monoxide, sulfur dioxide, nitrogen oxides, and many other compounds, depending on the chemical composition of the natural gas and on how well the natural gas burns in the flare. However, flaring is safer than releasing natural gas into the air and results in lower overall greenhouse gas emissions. About one-third of greenhouse gas emissions in the United States are from natural gas.

There were nearly 9,000 establishments in New Jersey that employed nearly 236,000 people in the manufacturing sector in 2020. The majority of businesses manufacturing and releasing carbon into the atmosphere are located in the northeastern part of New Jersey and close to the N.J. Turnpike (I-95)

Student Activity #8:

Use the resource links below to understand the economic importance of manufacturing in New Jersey to the economy and the steps being taken to make them sustainable. Create a visual presentation, have a class debate, or produce a news program about the importance of manufacturing to the economy and the need to make the production process sustainable and green.

[Rutgers University Climate Resource Center](#)

[New Jersey Greenhouse Gas Emissions Inventory Report \(2025\)](#)

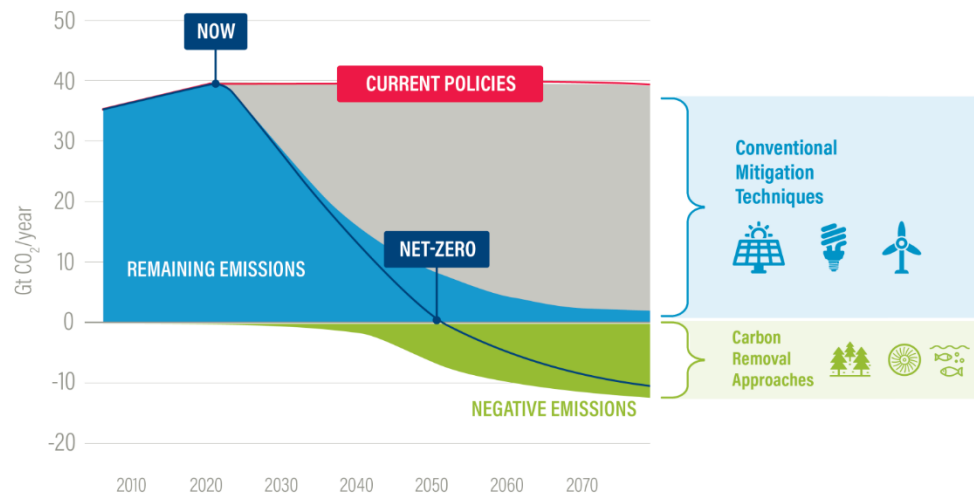
[Report on New Jersey's Manufacturing Industries \(2022\)](#)

[Maps and Charts of Locations of New Jersey Manufacturing Industries \(2023\)](#)

Solutions

[Manito Park Project in Berkeley Township](#)

Staying below 1.5 Degrees Celsius of Global Temperature Rise



Notes: Abbreviation: GtCO₂/yr = billions of metric tons of carbon dioxide per year.

This is a notional scenario showing the role of carbon removal in bringing emissions to net-zero by mid-century consistent with limiting global warming to 1.5°C above pre-Industrial levels. Faster and/or deeper emission reductions could reduce the role for carbon removal; slower and/or weaker emission reductions would increase the need for carbon removal.

Source: Based on IPCC (2018) and CAT (2021).



22.12.09

Some of the ways to remove greenhouse gases from the atmosphere are trees, grasslands or farms, processes using biomass from plants and algae to remove carbon dioxide and store it, capturing it directly from the site where it is released and storing it, and using minerals that react with carbon emissions to change it from a gas to a solid and permanently remove it. The forests of New Jersey currently store approximately 200 million metric tons of carbon, and on average sequester over one million metric net tons of carbon annually.

Student Activity #9:

Create a proposal or a plan to reduce greenhouse gases in New Jersey from manufacturing. Identify one specific manufacturing company in New Jersey and make suggestions for how they can become more sustainable. (planting trees, carbon storage, new sources of energy, biomass, etc.)

Make a presentation in the form of a letter, video, or slide show on why companies should make a commitment to a sustainable environmental plan to reduce greenhouse gas emissions.

Company	Employees	Location	
Merck & Co., Inc.	6,000	Rahway	NJ
Novartis Pharmaceuticals Corp.	4,779	East Hanover	NJ
Lockheed Martin Corp.	4,500	Moorestown	NJ
Nokia USA, Inc.	4,000	Murray Hill	NJ
Automatic Data Processing, Inc.	3,000	Roseland	NJ
Bayer HealthCare Pharmaceuticals, Inc.	2,500	Whippany	NJ
Bayer Healthcare, Consumer Care Div.	2,500	Whippany	NJ
Sanofi US	2,000	Bridgewater	NJ
Janssen Pharmaceuticals, Inc.	2,000	Titusville	NJ
Unilever North America	1,900	Englewood	NJ

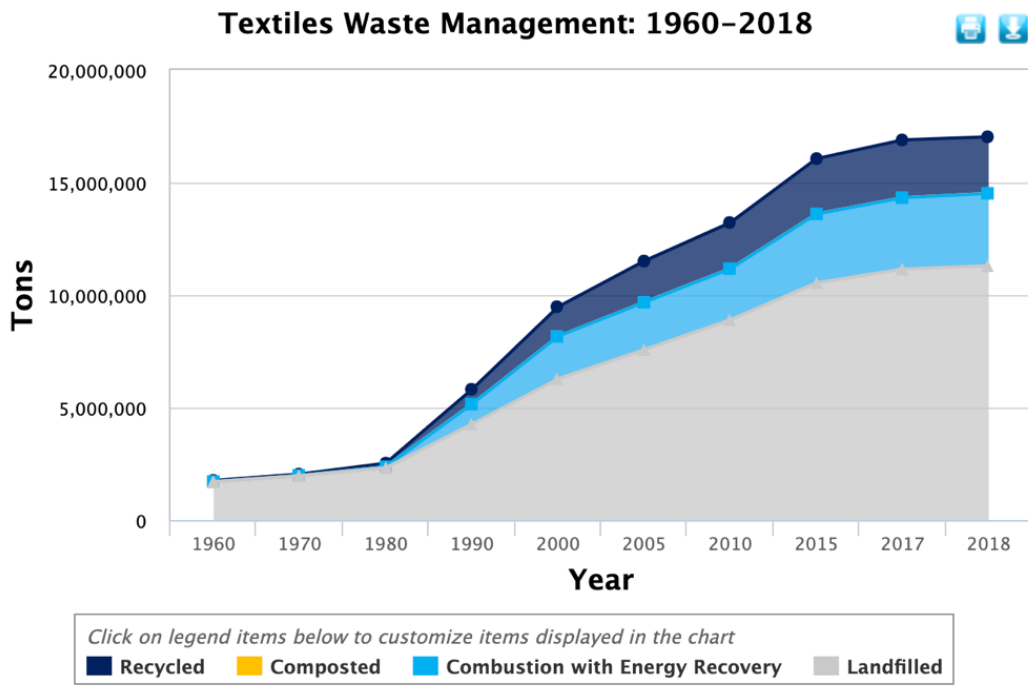
Textile or Clothing Waste

Essential Questions:

1. Why are Americans increasing the amount of clothing they own?
2. Is the greatest harm to the environment from the textiles and clothing happening during production, distribution, or disposal of the clothes we purchase?
3. Is it possible to change the behavior of people regarding their support for fast fashion or purchasing clothing and quickly disposing of it?
4. Is the problem of clothing waste similar, less serious or more serious than the problem of food waste? Why?

The Problem:

1. 92 million tons of textiles waste is produced every year! Of the 100 billion garments produced each year, 92 million tons end up in landfills. To put things in perspective, this means that the equivalent of a rubbish truck full of clothes ends up on landfill sites every second. Fast fashion brands are producing twice the amount of clothes today than in 2000. This dramatic increase in production has also caused an increase in both pre- and post-production textile waste. Due to the number of cut outs for clothing, a large number of materials get wasted as they cannot be used any further, with one study estimating that 15% of fabric used in garment manufacturing is wasted. Post-production, 60% of approximately 150 million garments produced globally in 2012 were discarded just a few years after production.
2. The apparel industry's global emissions will increase by 50% by 2030! If a business-as-usual scenario prevails in the coming years – meaning that no action is taken to reduce fast fashion waste – the industry's global emissions will likely double by 2030.
3. Every year, people in the United States throw out more than 34 billion pounds of used textiles. Divided across the population, that's more than 100 pounds of textile waste per person each year. 85% of all textiles– end up in landfills each year. The environmental cost of fashion accounts for approximately 10% of global carbon emissions.
4. The fashion industry is responsible for 20% of global wastewater! Dyeing and finishing – the processes by which color and other chemicals are applied to fabrics – are responsible for 3% of global CO₂ emissions as well as over 20% of global water pollution. These two processes have the highest impacts on resource depletion, due to the energy-intensive processes based on fossil fuel energy. It takes 20,000 liters of water to produce one kilogram of cotton. Besides being a huge source of water pollution, fast fashion also contributes to massive quantities of water being wasted every day. If this is difficult to picture, just think that about 2,700 liters of water are needed to make just one T-shirt, which would be enough for one person to drink for 900 days. Moreover, a single load of washing uses between 50 and 60 liters of water.
5. Nearly 10% of microplastics dispersed in the ocean each year come from textiles! Garments are a huge source of microplastics because so many are now made of nylon or polyester, both durable and cheap. Each wash and dry cycle, especially the latter, sheds microfilaments that move through our sewage systems and end up in waterways. It is estimated that half a million tons of these contaminants reach the ocean each year; the equivalent of more than 50 billion bottles.
6. 2.6 million tons of returned clothes ended up in landfills in 2020 in the US alone! Most of the items returned to retailers from consumers end up in landfill.



7. Fast fashion brands are producing twice the amount of clothes today than in 2000. This dramatic increase in production has also caused an increase in both pre- and post-production textile waste. Due to the number of cut outs for the clothing, a large number of materials get wasted as they cannot be used any further, with one study estimating that 15% of fabric used in garment manufacturing is wasted. Post-production, 60% of approximately 150 million garments produced globally in 2012 were discarded just a few years after production.

<https://earth.org/statistics-about-fast-fashion-waste/>

<https://www.bu.edu/sph/news/articles/2022/the-aftermath-of-fast-fashion-how-discarded-clothes-impact-public-health-and-the-environment/>

Student Activity #10:

1. **Conduct an inventory of the clothes in your closet. Count the number of shirts, sweaters, shorts, pants, coats, etc.**
2. **If possible, weigh the clothes you own on a scale.**
3. **Count the number of clothes that were dyed, especially jeans. Multiple the number of clothes by 20,000 gallons of water used to make each pair of colored items.**
4. **Identify places in your community to recycle used clothing. (Thrift shops, Goodwill store, drop off bins, etc.)**

Solutions:

There are few efficient technological solutions for clothing waste. The “Green Machine” manufactured by [HKRITA](#) (Hong Kong Research Institute of Textiles and Apparel) recycles some textiles into new fibers using heat and a biodegradable chemical. [Monki](#) is a company owned by H&M that sells recycled clothing created by the “Green Machine.” In the United States, the clothing is sold under the brand name, Coldwater Creek. The recycled textiles are currently available in stores in Hong Kong and Indonesia. HKRITA also has a patent on the Garment-to-Garment Recycling System (G2G), which recycles textiles without using chemicals. H&M is selling recycled textiles in the “Loop” in one of its stores in Stockholm, Sweden. The G2G system takes several days to recycle used textiles into wearable or new textiles. These innovative systems are not efficient for the increasing amount of clothing that is sold and discarded.



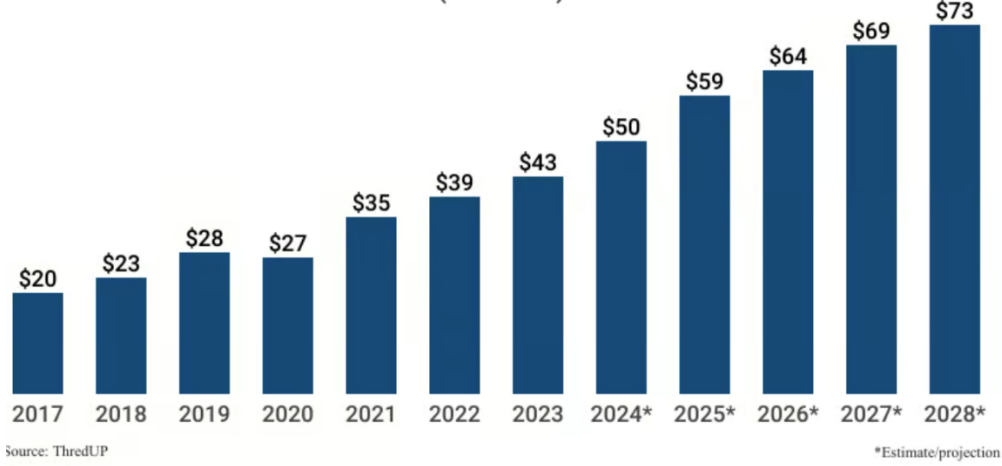
The Green Machine

The H&M Foundation, Patagonia, and L.L. Bean are companies with familiar names that support research addressing the problem of carbon emissions from discarded textiles and clothing.

Recycling used clothing through thrift shops, Goodwill stores, and drop off bins are other options for addressing the problems created by too much clothing. Clothing that is considered wearable is sold again or distributed to people in other countries. This is referred to as the ‘circular economy’ and financial incentives and public awareness of the problem is needed to make this a viable solution.

U.S. Thrift & Resale Market

(in billions)



Another possible solution to reducing greenhouse gas emissions is to produce clothing in the United States to reduce shipping costs from other countries. Companies producing textiles in the United States need to be encouraged (or required) to use plant and animal-based fibers such as cotton, wool, flax, hemp, and alpaca.

2021 County Rate Table										
2021 GENERATION, DISPOSAL AND RECYCLING RATES IN NEW JERSEY (Tons)										
COUNTY	POPULATION	GENERATION	DISPOSAL			RECYCLING				
			MSW	Non-MSW	TOTAL	MSW %	Total Recycled w/Add-ons	Total % Recycled		
	2021 Estimate	Disposal and Recycling								
Atlantic	274,534	755,609	213,670.05	122,792.62	336,462.67	117,321.55	35%	419,146.08	55%	
Bergen	955,732	2,221,921	695,689.61	390,840.75	1,086,530.36	408,123.59	37%	1,135,390.59	51%	
Burlington	461,860	1,012,395	341,002.37	161,472.08	502,474.45	208,182.79	38%	509,920.46	50%	
Camden	523,485	955,393	364,788.05	194,064.43	558,852.48	160,343.73	31%	396,540.07	42%	
Cape May	95,263	434,005	103,946.31	107,850.04	211,796.35	79,125.87	43%	222,208.96	51%	
Cumberland	154,152	441,522	97,952.41	110,215.35	208,167.76	171,581.28	64%	233,354.47	53%	
Essex	863,728	1,602,628	467,686.65	251,987.91	719,674.56	175,351.91	27%	882,953.49	55%	
Gloucester	302,294	1,137,130	198,881.03	106,750.55	305,631.58	323,481.66	62%	831,498.37	73%	
Hudson	724,854	1,041,616	421,350.86	157,190.51	578,541.37	155,658.20	27%	463,074.97	44%	
Hunterdon	128,947	206,861	57,341.09	54,171.59	111,512.68	35,516.95	38%	95,348.10	46%	
Mercer	387,340	923,884	273,054.93	89,386.24	362,441.17	153,736.13	36%	561,442.94	61%	
Middlesex	863,162	2,811,284	566,072.33	324,269.96	890,342.29	412,819.25	42%	1,920,941.63	68%	
Monmouth	643,615	2,074,285	508,282.07	350,816.78	859,098.85	363,938.15	42%	1,215,186.00	59%	
Morris	509,285	1,163,741	308,292.23	170,497.63	478,789.86	228,706.74	43%	684,951.12	59%	
Ocean	637,229	1,162,546	430,700.80	263,525.39	694,226.19	193,578.05	31%	468,319.85	40%	
Passaic	524,118	1,262,944	495,475.12	290,222.37	785,697.49	168,612.43	25%	477,246.69	38%	
Salem	64,837	136,567	39,605.85	44,033.50	83,639.35	18,998.37	32%	52,928.06	39%	
Somerset	345,361	852,165	257,520.58	191,307.66	448,828.24	153,538.21	37%	403,336.48	47%	
Sussex	144,221	262,597	75,472.57	33,952.52	109,425.09	60,751.90	45%	153,172.13	58%	
Union	575,345	1,500,288	357,798.47	362,355.62	720,154.09	158,251.33	31%	780,134.11	52%	
Warren	109,632	157,181	14,581.52	35,326.55	49,908.07	22,513.64	61%	107,272.53	68%	
TOTAL	9,288,994	22,116,562	6,289,165	3,813,030	10,102,195	3,770,132	37%	12,014,367	54%	

MSW recycled includes all paper and beverage containers, anti-freeze, motor oil, brush, grass, leaves, consumer electronics, food waste, dry cell batteries, other glass, other plastic and textiles when they are generated by a non-industrial generator. 10% of total metal has been included as non-industrial.
Street sweepings are no longer counted as a recyclable due to their management as a BUD. (NJAC 7:26A-1.3)

How does your county compare with other counties in New Jersey? Look at the percentage of items recycled.

[U.S. Government Report on Textile Waste \(2024\)](#)

[Report on Federal Entities Should Collaborate on Reduction and Recycling Efforts \(2024\)](#)

Student Activity #11:

- 1. Create a business plan for collecting used clothing in your school or community and bringing it to a thrift shop, Goodwill store, or drop off bin.*
- 2. Develop an educational awareness plan for the students in your school and parents in your community regarding the relationship between clothing production, distribution, and waste. Consider video, skits, podcasts, blog posts, and social media.*
- 3. Visit clothing or department stores in your community and discuss what you have learned with the owner, manager or public relations director of a large department store.*