

HUMAN ACTIVITIES - that contribute to an increase in global temperature.

Transportation

Fossil fuels are used to power planes, cars, trucks, trains, and ships. Greenhouse gases are emitted when fossil fuel is burnt.

Cement

Cement is mixed with gravel, sand, and water to make concrete. Concrete is used in buildings such as schools and hospitals and to make roads. The chemical reaction used to create cement also creates a lot of carbon dioxide.

Industry

Factories that burn fossil fuels release greenhouse gases into the atmosphere.

Electricity

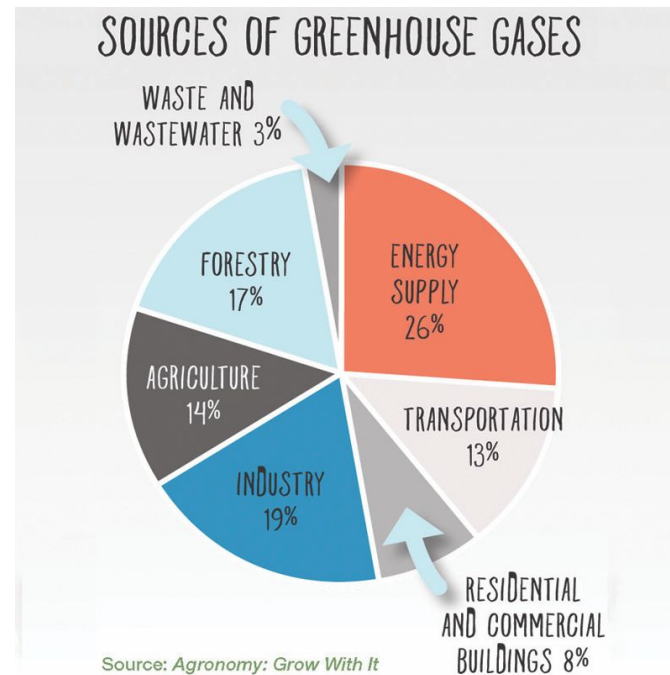
Fossil fuels are used to create much of our electricity.

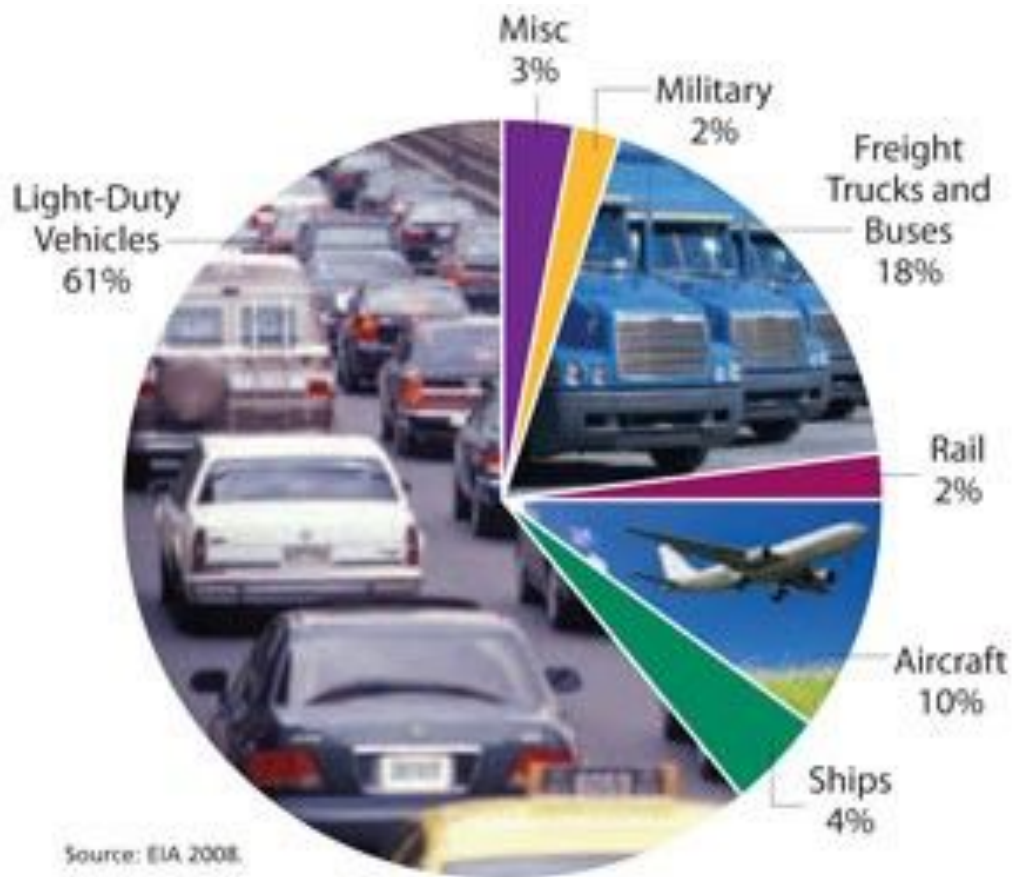
Agriculture

Agriculture is an important industry that supplies us with food. Greenhouse gases are emitted from cows belching (methane) and from fertilizer (nitrous oxide).

Deforestation

When trees are cut down, there are less plants to absorb carbon dioxide for photosynthesis. More CO₂ stays in the atmosphere if there are less trees.





PUBLIC TRANSPORTATION'S ROLE IN RESPONDING TO CLIMATE CHANGE

PUBLIC TRANSPORTATION PRODUCES **LOWER** GREENHOUSE GAS EMISSIONS THAN AUTOS



HEAVY RAIL TRANSITS, SUCH AS SUBWAYS AND METROS, PRODUCE **76%** LESS IN GREENHOUSE GAS EMISSIONS, WHILE LIGHT RAIL SYSTEMS PRODUCE **62%** LESS AND BUS TRANSIT PRODUCES **33%** LESS.

THE MORE PASSENGERS THAT ARE RIDING A BUS OR TRAIN, THE LOWER THE EMISSIONS PER PASSENGER MILE.



THE NUMBER OF RIDERS GREATLY IMPACTS TRANSIT'S EMISSIONS SAVINGS.

CAR TRANSPORTATION ACCOUNTS FOR



47%
OF THE CARBON FOOTPRINT OF TYPICAL AMERICAN FAMILY WITH TWO CARS.

BY FAR THE LARGEST SOURCE OF HOUSEHOLD EMISSIONS AND THE LARGEST TARGET FOR POTENTIAL REDUCTIONS.



POWER SOURCES AND VEHICLE EFFICIENCY ALSO IMPACT TRANSIT'S EMISSIONS.



NEW HYBRID-ELECTRIC BUSES CONSUME

15% TO 40%

LESS FUEL AND PRODUCE FEWER CARBON DIOXIDE EMISSIONS.

PUBLIC TRANSPORTATION REDUCES U.S. TRAVEL BY



102.2

BILLION VEHICLE MILES TRAVELED EACH YEAR

A COMBINED LAND USE, TRANSIT, AND NON-MOTORIZED TRANSPORTATION STRATEGY BUNDLE COULD REDUCE U.S. TRANSPORTATION BY

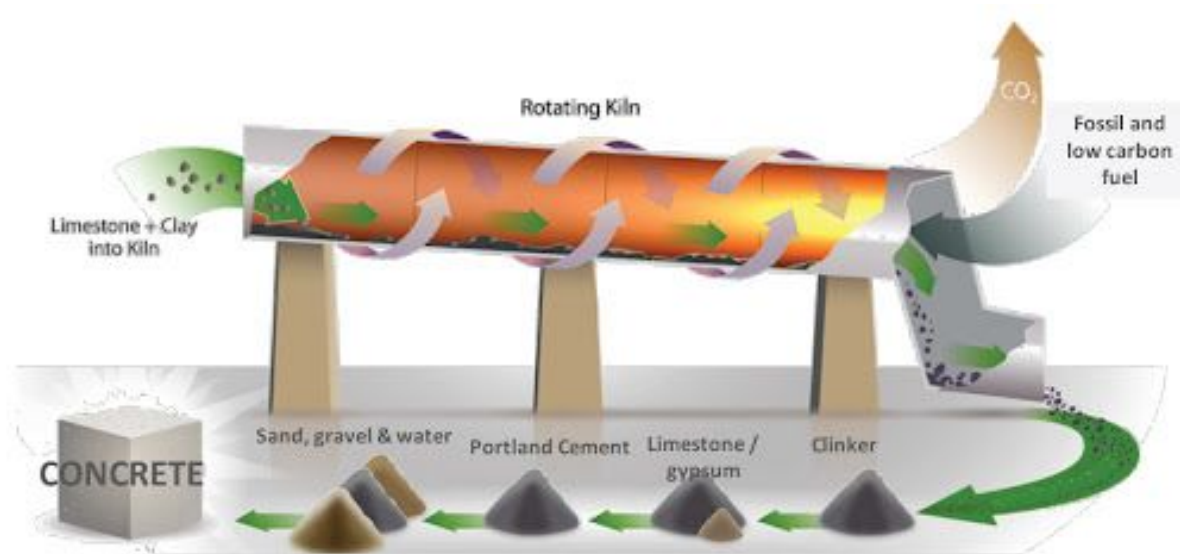


9%
AT AN AGGRESSIVE LEVEL.

15%
AT A MODERATE DEPLOYMENT LEVEL.

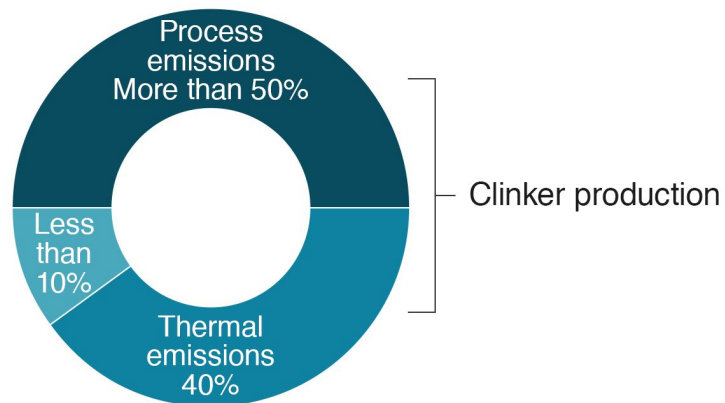
GENFARE

SOURCE: U.S. DEPARTMENT OF TRANSPORTATION
VISIT GENFARE.COM FOR MORE

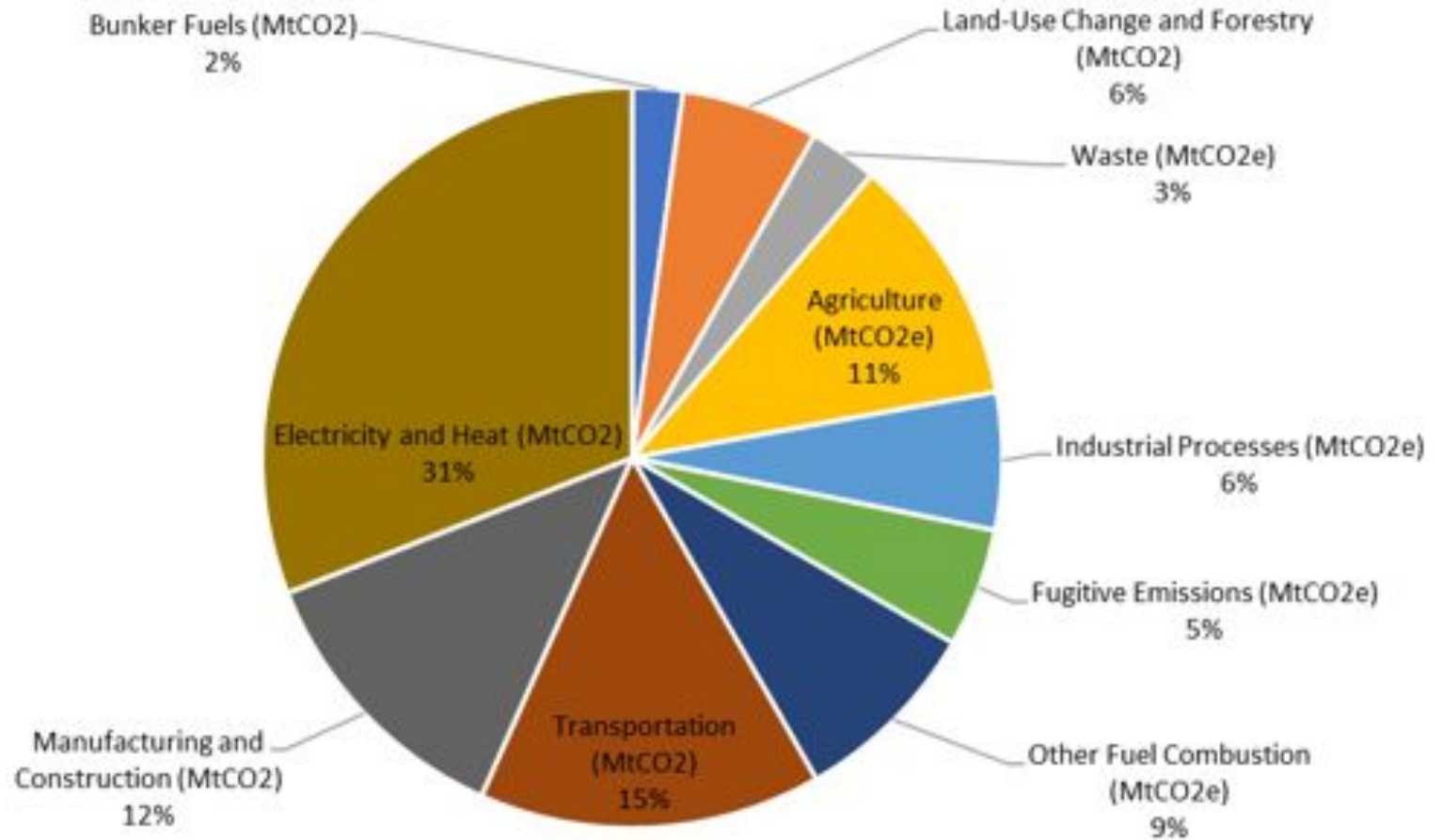


The production of “clinker” accounts for most of the CO2 emissions of cement production

- Quarrying & transport
- Grinding & preparation of raw materials
- Cooling, grinding, mixing



Global Manmade Greenhouse Gas Emissions Estimates By Sector From The World Resources Institute



NATURAL PROCESSES – that contribute to an increase in global temperature.

Respiration

Animals, including people, release CO₂ when they breathe.

Volcanoes

Erupting volcanoes release greenhouse gases into the atmosphere.

Decomposition

Decaying organic material releases methane which is a greenhouse gas.

Solar Radiation Changes

The sun has stormy and quiet cycles. When the sun is most active, more solar radiation reaches Earth.

Temperature, CO₂, and Sunspots

