



# FORD'S SUSTAINABLE MATERIALS STRATEGY

## What Goes In

A key goal in Ford's sustainable materials strategy is to identify opportunities to use recycled or renewable material – in place of nonrenewable virgin material – in its vehicles. Here are some of the green materials Ford is using:

### Recycled Materials (non-metal):

- Post-consumer plastics made into:
  - Underbody shields
  - Battery tray
  - Carpets
  - Heater and air conditioning housing
  - Fan shroud
  - Replacement bumpers
  - Wheel arch liners
  - Air cleaner assembly
  - Roof lining
  - Instrument panel
  - Parcel shelf
  - Sound proofing
  - Insulation
  - Seat fabrics
- Post-industrial yarns made into seat fabrics
- Post-consumer cotton from blue jeans made into interior padding
- Post-consumer nylon carpeting made into resin for cylinder head covers



### Renewable Materials:

- Soy-based polyurethane foams used for seat cushions, seatbacks and headliners
- Wheat straw and other plant fiber-reinforced plastic used for vehicle storage bins and interior door panel
- Engineering wood technology (recycled and renewable) used for interior trim
- Sugars made from corn, beet and cane under consideration for biodegradable plastic parts



## Reduce, Reuse and Recycle

What goes into a vehicle at the beginning of its lifecycle and what comes out of it at the end contribute greatly to its environmental friendliness. That's why Ford is committed to maximizing the use of recycled, renewable and recyclable content in its vehicles, while enabling maximum end-of-life vehicle recycling.

This "reduce, reuse and recycle" commitment is part of Ford's broader global sustainability strategy to reduce its environmental footprint and accelerate the global development of advanced fuel-efficient vehicle technologies.



## The End-of-Life Process

Once all of the salvageable material is removed from a vehicle at the end of its useful life, the remaining structure is flattened and pulverized into fist-sized pieces at the rate of one car every 45 seconds.

Industrial-strength magnets are used to separate the ferrous (iron and steel) from non-ferrous (aluminum) metals and the recovered ferrous metals are recycled to produce new steel. The steel industry recycles more than 14 million tons of steel from end-of-life vehicles each year.

Following the removal of all recyclable materials, the remaining non-recyclable ASR (auto shredder residue), which includes plastics, rubber, foam, fabric and glass, is disposed of in landfills.

## What Comes Out

About 85 percent of the materials used on Ford vehicles by weight are recyclable, and approximately 95 percent of all vehicles retired from use each year are processed for recycling.

- Dismantled, reconditioned and sold on the used auto parts market when possible:
  - Starter
  - Alternator
  - Engine
  - Transmission
  - Steering wheel column
  - Fuel tank
  - Seats
  - Stereo
  - Fenders
  - Doors
- Drained for reuse when possible:
  - Fuel
  - Coolant
  - Windshield fluid
- Batteries recycled or sold on the used auto parts market when possible
- Tires reused when possible, or shredded, cleaned and processed into playground surfaces and garden mulch

