

**Recycling is not just good for the environment. It's good for business.**

*Recycling plays a critical role in the circular economy by delivering valuable materials to the manufacturing supply chain.*

*These activities create sustainable jobs and grow local economies.*



Private sector recycling businesses employ 15,700 people in North Carolina.



Annually, North Carolina's recycling industry creates a \$3.2 billion economic impact in the state. And, there is plenty of room to grow.



North Carolina is home to more than 540 recycling businesses that recycle materials ranging from plastic bottles to paper, tires, metals, food waste, and electronics.



North Carolina manufacturers rely on recycled materials to make new products like packaging, textiles, compost, and construction products.



Recycling lowers the environmental footprint of new products, saves energy, reduces greenhouse gas emissions, and conserves limited landfill space.

## MORE ELECTRONICS RECYCLING LOOPS

Once a used computer is dropped off for recycling, it may go to one of 18 e-Stewards or R2 certified recycling facilities in North Carolina. Components recovered from computers can be used for a variety of new products.



Steel from the computer case may be processed through mills like Gerdau in Charlotte or Nucor in Darlington, SC to become rebar and beams for new construction.



Plastic may be sent to RePolyTex in Madison to become plastic plywood, used for a variety of construction applications.

Read about more recycling examples at [deq.nc.gov/recyclingloop](http://deq.nc.gov/recyclingloop)



**RECYCLENC.ORG**

This profile was created by the state's recycling office in the Division of Environmental Assistance and Customer Service (DEACS), a nonregulatory division of the NC Department of Environmental Quality.

# North Carolina RECYCLING LOOP



**When you recycle, you contribute to North Carolina's circular economy.**

# COMPUTER TO NEW ELECTRONICS

Recycling doesn't end at the curb or drop-off. See how your computer gets recycled into manufacturing components in North Carolina's circular economy.

## 1. RECYCLING

### Electronics Recycling Drop-off

Resident of Mecklenburg County brings a used computer to the county's electronics convenience site.\*



## 2. COLLECTION

### Powerhouse Recycling

Powerhouse Recycling dispatches a semi-truck to pick up the computer and other electronics from the county convenience site and haul them to the recycling facility in Salisbury.



## 3. SORTING

### Powerhouse Recycling

Trained staff offload, tag, and stage all electronics in Powerhouse Recycling's secure facility. The computer is sorted with other computers, which are serialized and audited.\*\*



## 4. PROCESSING

### Powerhouse Recycling

Sensitive data is destroyed and the computer is sent to an automated shredding and separation system to be broken down to clean, base commodities: steel, precious metal circuit boards, and plastic.



## 5. RECOVERY

Precious metal circuit boards are sent to global smelters and refineries to recover metals like gold, silver, copper and palladium.



## 6. MANUFACTURING AND USE

Precious metals recovered from the computer can be used to make a new circuit board in your next smartphone, laptop or computer.

\* 95 of 100 counties in North Carolina offer an electronics recycling program for residents.

\*\* Powerhouse Recycling is one of 18 e-Stewards or R2 certified electronics recyclers in the state.