**13.3 Energy in Ecosystems**

*Key Concept: Life in an ecosystem requires a source of energy*

* Starts with the Sun

Producers provide the energy for organisms in an ecosystem

* Producers give us carbohydrates
  + Glucose
  + Plants are producers
* Plant --🡪Cows ---🡪 Humans

Producers get their energy from non-living (abiotic) resources (the sun).

**Producers** are also called **autotrophs** because they make their own food.

* Producers and Autotrophs are the same thing.
  + Auto – self
  + Troph – energy

**Consumers** are organisms that get their energy by eating other living or once living resources

* Consumers are also called **heterotrophs** because they feed on different things.
  + Hetero- other
* Photosynthesis in most producers uses sunlight as an energy source.
  + Light (abiotic)
  + Carbon Dioxide (abiotic)
  + Water (abiotic)

Makes:

* Oxygen (abiotic)
* Glucose (abiotic)

**Chemosynthesis** in prokaryotic producers uses chemical as an energy source.