Plants and other producers use carbon dioxide in photosynthesis. They produce oxygen as a waste product. Carbon dioxide moves from the air into the leaves of plants. Oxygen moves from the plant into the air through the leaves.

Almost all living things, including plants, get energy from cellular respiration. This process releases energy from the sugar molecules in food. Oxygen is used in cellular respiration. Carbon dioxide is produced as a waste product.

The oxygen produced during photosynthesis is used in cellular respiration. The carbon dioxide produced in cellular respiration is used in photosynthesis. This is the oxygen-carbon dioxide cycle.