What is cap-and-trade?
Cap-and-trade systems, also known as allowance trading, can be best summed up as "pollution credits."

Under a cap-and-trade system, overall air quality goals are set for an area (such as the state of California) and specific sources of air pollution (such as power plants and waste incineration facilities) are given a certain number of allowances, which represent the amount of various pollutants that the organization or facility is allowed to emit. Facilities that come in under that allowable limit because of air pollution control systems can then sell their leftover allowances to other facilities and organizations on the open market. This allows the facilities that buy up such allowances (pollution credits) to pollute more, because other facilities are polluting less.

In theory, the system does have some good points: rewarding facilities that control air pollution and providing a means for those who cannot afford the latest air pollution technologies (or who have not completed upgrades) to buy some maneuvering room. A big problem with cap-and-trade systems is that they allow for certain parts of the country to become much more polluted than they should be. Overall air standards in the nation might be met, but people in some parts of the country get horrible air quality as a result, and this is neither fair nor healthy. It is a problem caused when cap-and-trade systems are left too open-ended, which is generally the case.

(Source: Center for Environmental Health)

What is a carbon offset?
For many industries, it is not easy to reduce the amount of carbon dioxide and other greenhouse gases. A carbon offset is a promise by one entity to reduce greenhouse gas pollution in another location, to offset the pollution generated by a company that must meet emissions limits. This allows a polluter to meet its emission reductions by purchasing an offset from someone else. For-profit businesses and nonprofit groups work to create offset projects to sell to polluters, but a company can also purchase a carbon offset—like any other commodity—from a carbon broker at a financial firm or bank.

(Source: California Watch)

What is REDD?
Reduced emissions from deforestation and forest degradation (REDD) is a United Nations acronym for a program that proposes to provide offset credits to governments, companies, or forest owners for keeping their forests instead of cutting them down. Uncertainties in the definition of what constitutes a forest, who should be compensated for the preservation of the forest, and what preservation entails are hotly contested points.

—Ed.