

NO_x CREDIT AND SCR

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Emission Credit Brokers

The U.S. Environmental Protection Agency (EPA) has mandated emissions levels that no polluting sources can exceed without penalties. When a company voluntarily spends money to reduce pollution below those mandated levels, emission credits are given as incentives. The emission credits are nearly equal to the amount of pollution abated. For example, if a company reduced 80 tons per year at one of its facilities, the company would receive approximately, in all probability, 64 tons of emission credits. Normally, 20 percent is retired for the benefit of the environment. Emission credits, other than greenhouse gases, can only be bought and sold in the same Air Resources Board (ARB) Region in which they were created.

The amount of money the emission credit is worth depends on supply and demand. As an example, in the height of the California energy crisis, NO_x reclaim credits were trading at \$110,000 a ton. By creating emission credits, a company can offset the cost of applying technology, and sometimes profit, to lower pollution below mandated levels, while the environment benefits from the 20 to 30 percent of the pollution that is retired.

One source of emission credits is through retrofitting diesel engines. To date, however, it has been particularly prohibitive due to the cost of the technology. Using natural gas vehicles and dual-fuel vehicles as an alternative is expensive and has enormous obstacles to overcome in order to truly be effective.

Conversely, by utilizing aftermarket devices such as selective catalytic reduction (SCR) systems, companies can retrofit their on-road and off-road diesel fleets or stationary generators early, create emission credits, and profit.

New technologies such as SCR systems are incredibly cost effective and will now allow companies to retrofit their mobile and smaller stationary sources at a much lower cost and, with market-based incentives like emission credits, actually be able to profit.

Retrofit devices can also be purchased using emission credits. For example, by implementing an emission reduction device, using an SCR system, as an example the following steps would be taken:

1. Company determines purchase price from vendor.
2. Emission Credit Brokers (ECB) negotiates with local ARB.
3. Retrofit provider installs SCR device.
4. ECB sets up monitoring.
5. ECB pays vendor for device.
6. After first year, ECB starts receiving compensation from EPA for NO_x reduction from installed device.