



Methane is a chemical compound with the chemical formula CH₄. It is the simplest alkane, the main component of [natural gas](#), and probably the most abundant organic compound on earth. The relative abundance of methane makes it an attractive fuel.

Natural gas has become an increasingly important energy source. The primary component of natural gas is methane, which has the advantage of releasing less carbon dioxide when it's burned, when compared to many other hydrocarbon fuels. But apparently, because of the very stable structure of the methane molecule, it can be difficult to access the energy stored within and unburned methane can escape into the atmosphere. It is understood that its greenhouse gas impact is some twenty times more powerful than carbon dioxide.



Catalysts are materials that make a chemical transformation quicker, easier, more energy efficiently, and often safer. The catalytic converter transforms exhaust gases into innocuous products. Catalysts that are currently available to burn methane, however, do not do so completely, leaving unburned methane to escape into the atmosphere. In a natural-gas engine, methane tends to be a major part of the exhaust gases. Furthermore, conventional catalysts can require high temperatures of 600 C to 700 C to encourage reactions to move along. However, the catalysts themselves often lose their efficiency or deactivate when exposed to the high temperatures generated by methane combustion. The challenge has been to come up with materials that are active enough and stable enough to withstand the harsh conditions of methane combustion.

- If we can help you with a tailor made solution to fulfill your demands in emission reduction, please [contact us](#) . Also for any questions regarding this subject we are glad to answer you as good as possible. [Contact us](#)



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