

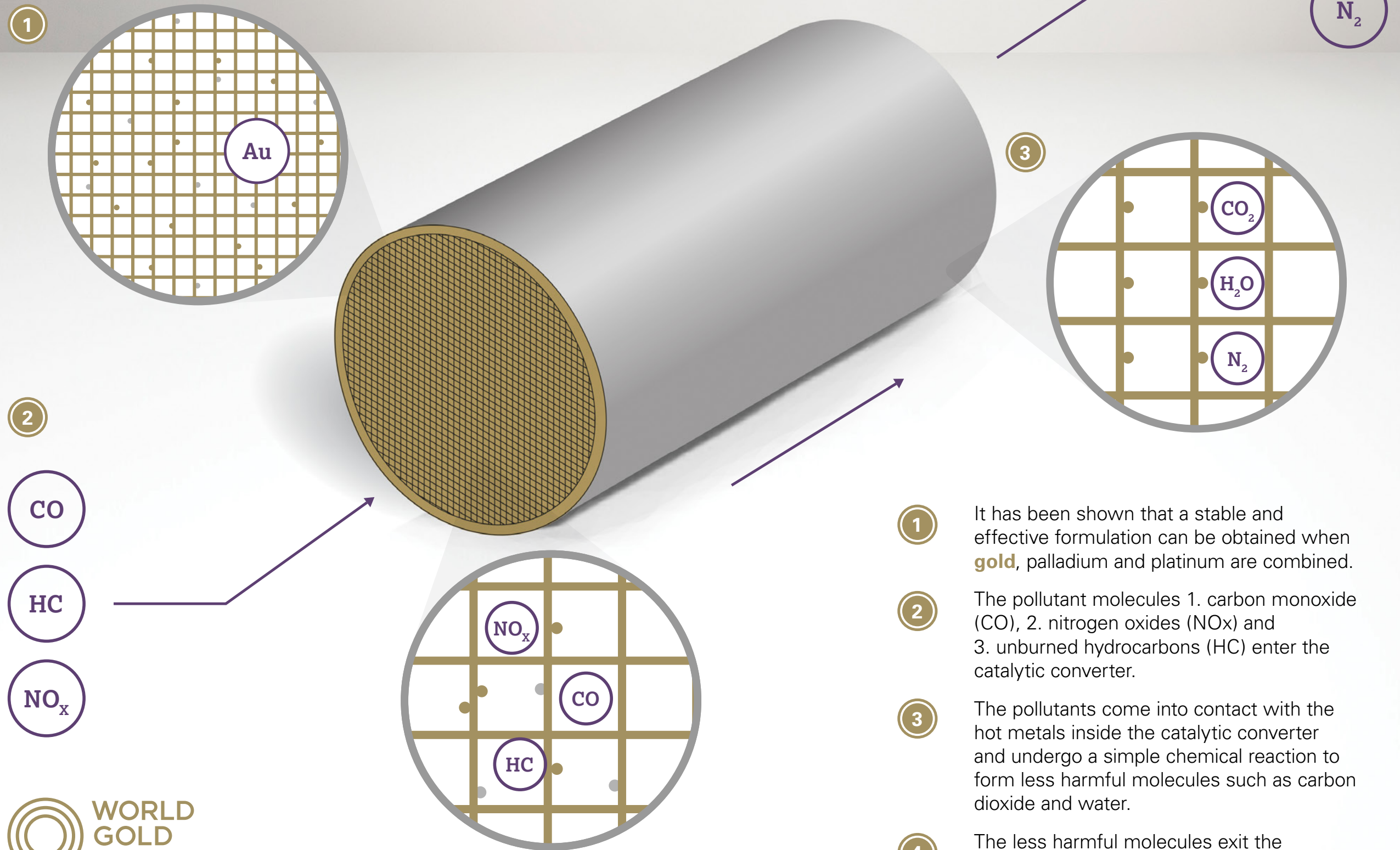
Gold in catalytic converters

A new technology innovation supported by the World Gold Council, now being implemented by the automotive industry

Most vehicles on the road require a catalytic converter to help remove pollutants generated by burning fuel in an engine.

The catalytic converter itself is made from a heat resistant substrate, with a large internal honeycomb structure covered in a thin coating of tiny particles of metal.

Platinum, palladium and rhodium are the metals commonly used within catalytic converters to help break down pollutants. However, **gold** can also be used...



1

2

CO

HC

NO_x

3

CO₂
H₂O
N₂

1

It has been shown that a stable and effective formulation can be obtained when **gold**, palladium and platinum are combined.

2

The pollutant molecules 1. carbon monoxide (CO), 2. nitrogen oxides (NO_x) and 3. unburned hydrocarbons (HC) enter the catalytic converter.

3

The pollutants come into contact with the hot metals inside the catalytic converter and undergo a simple chemical reaction to form less harmful molecules such as carbon dioxide and water.

4

The less harmful molecules exit the catalytic converter.

4

CO₂

H₂O

N₂