

Table 3: Petrol engine technologies, emission performance, costs and fuel consumption for emission standard levels

Standard	Technology	Composite <u>a</u> / NO _x reduc- tion (%)	Additional <u>b</u> / production cost (1986 Swiss francs)	Fuel consumption index <u>a</u> /
A.	Baseline (Current conventional spark-ignition engine with carburettor)	- <u>c</u> /	-	100
B.	(a) Fuel injection + EGR + secondary air <u>d</u> /	25	200	105
	(b) Open-loop three-way catalyst (+EGR)	55	150	103
	(c) Lean-burn engine with oxidation catalyst (+EGR) <u>e</u> /	60	200-600	90
C.	Closed-loop three-way catalyst	90	300-600	95
D.	Closed-loop three-way catalyst (+ EGR)	92	350-650	98

a/ Composite NO_x reduction and fuel consumption index estimates are for an average-weight European car operating under average European driving conditions.

b/ Additional production costs could be more realistically expressed as a percentage of the total car cost. However, since cost estimates are primarily for comparison in relative terms only, the formulation of the original documents has been retained.

c/ Composite NO_x emission factor = 2.6 g/km.

d/ "EGR" means exhaust gas recirculation.

e/ Based entirely on data for experimental engines. Virtually no production of lean-burn engines exists.