But will the planet notice?

Gernot Wagner

EDF
ENVIRONMENTAL DEFENSE FUND®
Finding the ways that work


small


FIRST
Funding the turn to safety
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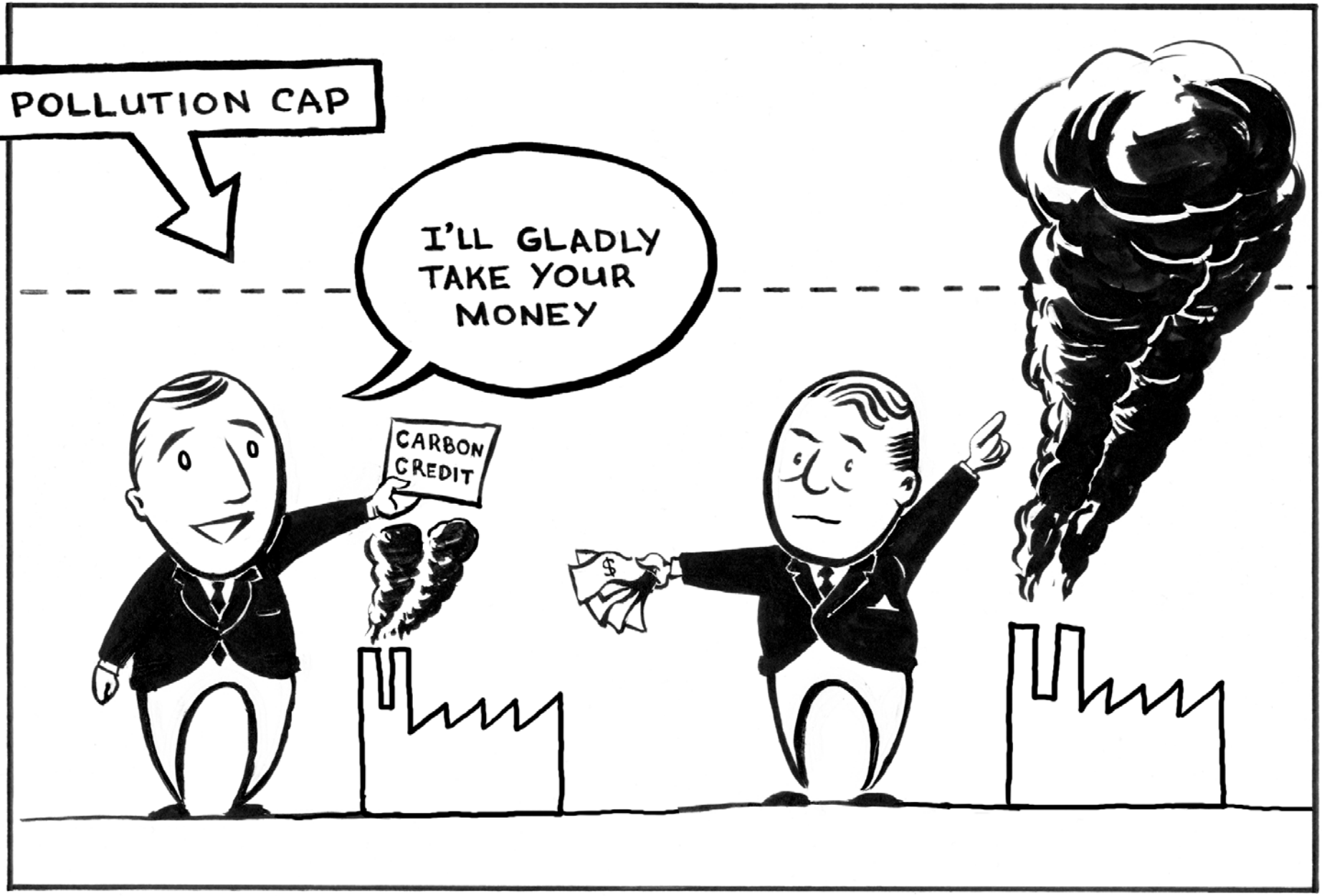
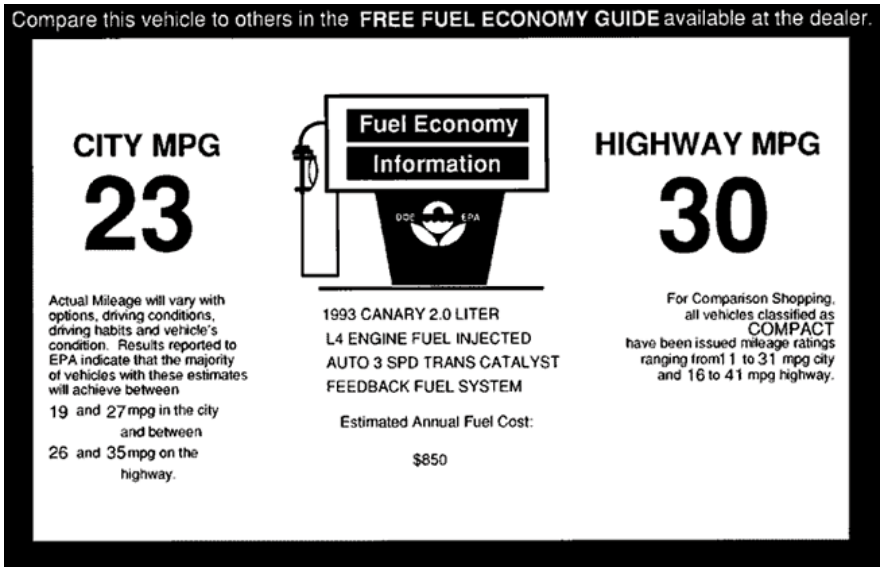

POLLUTION CAP
I'LL GLADLY TAKE YOUR MONEY
CARBON CREDIT

Would you choose the standard or hybrid version?

The “rational” view of car-buying behavior

You walk into a dealership, choose a car based on brand, color, cylinders, looks and general feel and then start comparing prices among different options. You also look at gas mileage, today’s price per gallon, form an opinion about future gas price trends, attach probabilities to them, calculate expected total gas costs over the lifetime of the car, balance all of that information against expectations over future inflation rates and interest paid were you to just leave your money in the bank, take into account how your preferences for driving will evolve over time, make a few assumptions about how future buyers will perceive your choice when you are ready to sell the car, and do all that (and probably a few things I’m missing), while the car salesman at the dealership explains to you the awesome industry-leading warranty and zero-down loan program offered through the end of the month…



New fuel economy labels
are here to help

Table 6: **Alternative Discount Rates and Time Horizon**

Dependent variable: Vehicle price

Specification	(1) **Primary**	(2) $r = 5\%$	(3) $r = 18\%$	(4) $r = 27\%$	(5) 5 yr horizon
G_{jat}	-0.61	-0.52	-0.81	-1.02	-0.79
$[-\gamma/\eta]$	(0.07)	(0.06)	(0.09)	(0.11)	(0.09)
ln(market share)	-2372	-2442	-2248	-2168	-2029
$[-(1-\sigma)/\eta]$	(723)	(720)	(726)	(728)	(726)
ln(nest share)	-1807	-1804	-1816	-1825	-1842
$[-\sigma/\eta]$	(655)	(663)	(640)	(630)	(612)
Observations	1,053,058	1,053,058	1,053,058	1,053,058	1,053,058
ja groups	37,794	37,794	37,794	37,794	37,794
F (excl inst)	29.1	30.1	27.6	26.7	25.4

Notes: Sample includes monthly observations Jan 1999 - Mar 2008 of all passenger cars and light trucks age 0-25. Model*age fixed effects, monthly time dummies, and model year dummies are included. Column (1) is the primary specification from Table 3, column (1). Nest share is the share of all vehicles in the same class. A 9% annual discount rate is assumed in the calcuation of gas costs. Columns (2)-(4) use a 5%, 18%, and 27% discount rate in the calcuation of gas costs, respectively. Column (5) uses a 9% discount rate but only accounts for the next 5 years of gas costs. Standard errors are robust and clustered by ja (model * age).

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For every $1 in fuel savings later, car buyers spend $0.61 more today

Car buyers are “60% rational” in most traditional, standard economic sense

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