Abstract: We consider the optimal taxation of a good which exhibits a negative externality, in a setting where agents differ in their value for the good, their disutility from the externality, and their value for money, while the planner observes neither. Pigouvian taxation is the unique Pareto efficient mechanism, yet it is only optimal if the planner puts higher Pareto weights on richer agents. We derive the optimal tax schedule for both a narrow allocative objective and a utilitarian objective for the planner. The optimal tax is generically nonlinear, and Pareto inefficient. The optimal mechanism might take a “non-market” form and cap consumption, or forbid it altogether. We illustrate the tractability of our model by deriving closed form solutions for the lognormal and Rayleigh distribution. Finally, we calibrate our model and derive optimal taxes for the case of air travel.