Informationally Efficient Climate Policy Designing Markets to Measure and Price Externalities

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I study how policymakers can access and act on the information about climate change damages that is dispersed throughout the economy. I analyze a new dynamic deposit-refund instrument (called “carbon shares”) that I show can: i) efficiently price emissions conditional on information, ii) efficiently incentivize removal of past emissions conditional on information, and iii) efficiently aggregate dispersed information about the social cost of emissions. Conventional emission taxes generally succeed at only the first of these objectives. Rather than projecting damages in all future periods and all possible states of the world in order to calculate the optimal tax, the regulator here estimates damages as they are realized and empowers markets to perform price discovery about future damages.

**Url:**<https://www.nber.org/papers/w30535>