



ENVIRONMENTAL DEFENSE FUND

finding the ways that work

## Cutting Global Warming Pollution For a Dime A Day

### *Key Findings from Recent Government Analyses of Current Climate Legislation*

Last week, the Congressional Budget Office published its analysis of the costs of climate legislation currently under consideration by the House — H.R. 2454, the American Clean Energy and Security Act (ACES). Earlier this week, the Environmental Protection Agency released its own analysis of the bill.

Taken together, these two studies represent the most credible analyses available of the economic impacts of this legislation. The EPA study is a comprehensive macroeconomic analysis of the costs of reducing carbon emissions over the entire duration of the program, from 2012 through 2050. The CBO study, meanwhile, is a more focused analysis of the potential impacts in the year 2020, based on detailed data on current production and consumption patterns in the U.S. economy.

It's crucial to note that these estimates all correspond to the cost of climate policy compared to business as usual. But in reality, the business-as-usual scenario doesn't exist. It's a fantasy-land scenario in which there are no economic costs of unchecked climate change – and we all know that's there's no such thing. The EPA and CBO analyses, like almost all economic modeling studies, looks at only one side of the ledger: the costs of action, but not the benefits of averting the catastrophic consequences of climate change.

Here are a few highlights.

#### *Economic growth*

EPA's new analysis shows that the U.S. economy will grow strongly under the proposed legislation. According to the EPA forecasts:

- In the year 2015, the estimated impact on GDP of HR 2454, relative to a no-policy case, ranges from a slight reduction of 0.4% to an increase of 0.1%.
- By the year 2030, the U.S. economy will be 70 percent larger than it is today. The estimated impact of HR 2454 is a reduction of 0.4% to 1% relative to the baseline.
- On an annual basis, the estimated impact will be imperceptible: just two- to four-hundredths of a percentage point (0.02 - 0.04 %).

- To put that in perspective, if the American economy will reach \$23 trillion in January 2030 if we do nothing to address climate change, it will get there sometime between February and May with a carbon cap.

### *Household impacts*

While macroeconomic analyses can give a sense of the big picture, it may be more useful to hone in on the household-level impacts. What are the costs for the average American family? The EPA and CBO analyses gives us a clear sense of what the costs of the bill are likely to be, and they are small.

- The CBO estimates that the cost to the average household in the year 2020 will be just \$175 — less than fifty cents a day.
- Because of provisions designed to protect low- to moderate-income families, the impacts are even smaller at the low end of the income scale. CBO estimates that the poorest one-fifth of U.S. households would see a *benefit* of \$40 a year through tax refunds and assistance with utility bills. The next fifth of households, meanwhile, would pay just \$40.
- The EPA's analysis, using more dynamic models of the macroeconomy, comes in with even lower costs. According to the EPA's estimate, for example, the average cost to households in the year 2015 will be just \$21 to \$70.
- In fact, over the entire span of the bill, the EPA's estimated average annual cost is just \$80 to \$111 per household, in present value. That is just 22 to 30 cents a day for the average American family — less than the cost of a postage stamp.
- In fact, on a per-person basis, EPA's estimated average annual cost amounts to only 9 to 12 cents — about a dime a day.

These estimates include the entire net costs to households of the program, taking into account higher prices for fossil fuels as well as savings from energy efficiency and the hundreds of billions of dollars (in present value) that the legislation returns to households over the program.

### *Energy costs*

EPA provides detailed estimates of energy costs in its analysis. While these are included in the household cost figures given above, the effect of climate legislation on energy prices is often of particular interest in its own right.

- According to EPA's modeling, average electricity prices are essentially unaffected by the legislation until the year 2030, when they are estimated to be 14% higher than under the

business-as-usual case. Even then, however, electricity *bills* would be less than 3% higher than the reference case, as a result of the savings from investments in energy efficiency that the legislation will promote.

- What's more, in the years before 2030, EPA projects that the average household's electricity bills will go *down* as a result of the legislation. For example, in the year 2020 the average household's electricity bills under HR 2454 are projected to be 8 % below their levels in the no-policy case.
- As a result, overall household energy expenditures (excluding gasoline) would also fall, by about 7 % in 2020 relative to the no-policy case.
- Finally, while gasoline prices would rise, the effect is tiny. In the year 2020, the EPA forecasts that gasoline prices will be only 14 cents per gallon higher than they would be without any policy. On average, that's just 2 cents per gallon per year relative to the no-policy case. That's an imperceptible change, especially compared with the large swings in gasoline prices we have seen in recent years — sometimes as large as a dollar over the course of a few months.
- The real concern with petroleum is our increasing dependence on foreign oil. EPA estimates that HR 2454 would save us roughly \$20 billion annually over the next two decades.

In truth, this is old news. The EPA and CBO studies are completely consistent with everything else we know. The consensus among credible analysis is that the American economy will grow robustly while cutting carbon pollution and investing in a clean energy economy.

We're sure to hear a lot of numbers that have been cherry-picked from reports issued by whatever modelers-for-hire can be found to support the desired point. Forecasts are not crystal balls: they are only as good as the assumptions that go into them. And some of the assumptions used to get some of the numbers that will be floating around are just simply not credible.

The EPA in particular has set the gold standard in economic analysis by using two of the most credible, transparent, and peer-reviewed models available. And the bottom line from that analysis is that for about a dime a day we can solve climate change, help get our economy off foreign oil, and invest in a clean energy economy.

