

# **Economic Impacts of Federal Carbon Fee and Dividend on California Environmental Justice Goals**

*Citizens' Climate Lobby (CCL) promotes Carbon Fee and Dividend (CF&D) as a national program to reduce U.S. emissions. CCL members in California are asked about the economic and environmental justice benefits of their proposed CF&D policy on Californians in different demographics. This is a summary of relevant data from two studies with some discussion. Appendix A contains a description of CF&D. Compiled by Jan Dietrick, Ventura Leader, Citizens' Climate Lobby. ventura@citizensclimatelobby.org 805-746-5365.*

## **What is the environmental and economic impact of a national carbon fee and dividend (CF&D) program on Environmental Justice Communities and low-income and Californians of color? Two studies offer forecasts as follows:**

REMI Study by Regional Economic Modeling Inc for the United States projects the following national conditions in 10 years under CF&D:

- 2.1 million more jobs
- Poorest 20% of Americans seeing largest boost in employment
- Fewer people on state assistance
- CO2 emissions 31% below 1990 levels.
- 90,000 American lives saved from better air quality.
- \$80 - \$90 annual billion increase in GDP

REMI Regional Summary for the Pacific (PAC) Region (Alaska, California, Hawaii, Oregon, Washington) projects the following major conclusions in 10 years under CF&D:

- 450,000 more jobs,
- Early job growth due to lack of coal industry, plateaus after 2025
- Large +\$34 billion increase to the GRP (Gross Regional Product)
- Dividend boosts consumer spending in labor intensive industries, many entry-level

REMI: Top growth occupations in the Pacific Region:

- 1) Retail sales workers (+37,000 jobs),
- 2) Health diagnosing and treating practitioners (+22,000 jobs),
- 3) Building cleaning and pest control workers (+20,000 jobs).

REMI: Top 3 industry winners (GRP) in the Pacific Region

- 1) Real Estate (+\$5.98 billion (b) to GRP)
- 2) Retail Trade (+\$4.70b)
- 3) Ambulatory Health Services (+\$4.65b)

REMI: Top 3 industry losers (GRP) in the Pacific Region

- 1) Air Transportation (-\$2.67b)
- 2) Petroleum and Coals Manufacture (-\$1.22b)
- 3) Oil and Gas Extraction (-\$0.81b)

REMI: Top 3 Job Gainers in the Pacific Region

- 1) Retail Trade (+65 thousand (k) jobs)

- 2) Ambulatory Health Services (+58k)
- 3) Administrative and Support Services (+31k)

REMI: Top 3 Job Losers in the Pacific Region

- 1) Air Transportation (-9k)
- 2) Scenic and Sightseeing Transportation; Support activities for Transportation (-4k)
- 3) Oil and Gas Extraction (-3k)

### Household Impact Study by Kevin Ummel

This looks at the initial difference between rising expenses and dividend income by age, race, geography, and income level during the first year that Carbon Fee and Dividend is in effect. It provides the per cent of the population to benefit by zip code that can be related to Enviro Screen maps. Key findings:

- **53% of US households and 58% of individuals receive a net financial benefit** as the dividend exceeds the estimated increase in costs of goods purchased. This analysis includes none of the health and environmental benefits that come with the reduction of GHGs and is conservative in other regards.
- **Increase in disposable income.** Average annual after-tax dividend at current emissions levels per this study (to be distributed in monthly dividend installments) represents an increase in disposable income due to the rebate of \$664 per household (\$264 per person). The distribution of net 100% of revenues from fees is the primary reason that this policy is capable of passage by the end of 2017 because political conservatives can support it.
- **Gains relative to rising costs are concentrated among those considered “most vulnerable” within our society:** Eighty-eight per cent of low-income households are benefited by the policy. The youngest and oldest and minorities also fare better than other demographics. Since the dividend formula is not means-tested, this effect stems simply from charging for pollution and returning proceeds equally per person; not any type of redistribution.
- **The highest income from the climate dividend goes to minority households:** The mean net financial benefit (NFB) is \$148 to minority households. The next highest amount to any demographic is just \$2 for elderly households (defined as not more than two adults one of which is 65+, and no children).
- **Latino households do best according to this model.** Three-fourths of Latino households are benefited by the policy, because they are not only poorer than White households (generally associated with a lower carbon footprint) but also significantly larger in size. Since the dividend formula benefits larger households (and especially households with multiple adults), this leads to both higher pre-tax dividend and net financial benefit.

- **Results are conservative as far as percentage of low-income households that benefit**, because it assumes full pass-through of costs to consumers. Other research indicates that somewhere between 10 and 20 percent of the cost of the fee would be paid by producers and not passed onto consumers. This would mean that consumers would face smaller price increases than currently projected in the study, though there would be other effects on employment, salaries, and investment returns. This would in turn result in a larger net financial benefit for wage-earners and lower for those who own businesses or investments.
- **11% in the bottom quintile by income would not see a financial benefit indicated a need for further study.** Some will be college students supported by parents yet whose own income through a part-time job lands him/her in the bottom quintile. This is new information and CCL is interested in further characterizing such households in future investigations.
- **Californians fare better than in many other states** due to comparatively mild climates and low-carbon electricity.
- **Over 70% do better in some rural zip codes, noticeably in the San Joaquin Valley** while over 55% of households in California do better in most of the zip codes. Suburban areas tend to fare worse.

## Discussion

### Fumes, smokestacks, tailpipes

Air pollution is an important health problem, particularly near oil production and distribution infrastructure, gas-fired power plants, and busy roads and freeways. Air pollution from these fossil fuel sources disproportionately harms low income people and people of color, causing lower life expectancy.

A carbon fee on all oil, gas and coal as it enters the economy must have no exemptions for any industries or geographic areas in order to assure cleaner air everywhere. A steadily rising federal price on carbon will immediately begin significant and ongoing improvements in air quality, leading to improved health outcomes for tens of thousands of people each year. The tax will particularly help people in areas suffering a disproportionate impact from pollution.

### Leaks, spills, explosions

There have been at least ten incidents in California larger than the oil spill in Goleta in 2015. Hundreds of large and small leaks are reported each year. Between 2000 to 2010 there were 177 pipeline incidents that caused 9 fatalities and 24 injuries. The risks of large spills, leaks and explosions have expanded.

At the same time more than half of pipelines are at least 50 years old and only some 10 per cent of gathering lines are federally regulated. With a steadily rising price on carbon there may be an initial rise in incidents as small companies that don't adapt to a low-carbon economy go out of business. However, the long-term result will be steadily fewer

surprise malfunctions and accidents in oil and gas infrastructure and transportation. There will gradually be less need to sue polluters and lax regulators and engage in political battles with industry for proper regulations. Risks will decline and California's safe and sustainable community goals will be achieved sooner.

### **Poverty, unemployment and socioeconomic inequity**

Among the various possible methods by which Congress can price carbon, CF&D provides the greatest economic benefit to low income Californians. Because California politics allows for use of a carbon pricing system that is not revenue neutral, it can continue to invest in targeted programs to rectify the greatest inequities. If CARB decides it is more effective to modify the cap and trade system, it will have more flexibility to adjust to and target these inequities because a national program is assuring comprehensive intrastate and national reductions in emissions with an economic cushion for every household.

This comprehensive assistance to almost all low-income households is similar to the commensurate comprehensive cleaning of the air across the landscape regardless of whether a neighborhood is in a designated Environmental Justice Community. The economic benefits and improved air quality both result from the broad impact of federal Carbon Fee and Dividend.

The designation of EJ Communities will be no less important, but CF&D will serve as a broad safety net that helps the poor everywhere. The economic stimulus provided by CF&D will include more consumer spending and more jobs in the service sector, and will lead to economic growth and reduced unemployment.

Finally, the key factor in business profitability will be the degree to which an enterprise can lower its "carbon footprint." This creates opportunities for small and local businesses whose clever and innovative people will find and use new low carbon strategies.

### **Timeline**

California's innovation and environmental justice investment goals may not have as much funding due to declining revenues resulting from more rapidly declining greenhouse gas emissions at some point after CF&D takes effect. It is difficult to predict the timing and magnitude of the impact of CF&D on this funding. Investment goals and funding sources may need to be adjusted.

No matter how much California invests in social equity and its own carbon reduction programs, unless and until there is a national price on carbon the necessary national reductions in emissions will not occur. Unless and until the United States prices carbon, the efforts of the rest of the world to reduce global emissions will not succeed. Success in curbing climate change can only occur on a global basis with U.S. leadership.

We don't need to review how the climate is changing at an increasingly dangerous rate. In the political environment of the U.S. Congress a carbon fee system is the most likely to be enacted. It will be simple to implement. It will result in ambitious emissions reduction

goals and targets being met, pollution will decline, and poverty will be reduced. Californians will export clean technology globally. The nation and the world will see that the best expression of a healthy patriotism is to emulate what we here are doing.

A CF&D program would not necessarily be the best choice for individual states such as California to use. California is rightly proud of its current emissions reduction framework, and it is unlikely (and unnecessary) for California to abandon its current framework once CF&D is enacted at the national level. CF&D, however, is the best choice for the nation because it forces all states to do their part, and it will support California's ability and desire to target climate programs and investments to meet the needs of the most vulnerable among us.

### **Appendix A:** **Description of Federal Carbon Fee and Dividend** **Advocated by Citizens' Climate Lobby**

Carbon Fee and Dividend (CF&D) is an upstream carbon tax or fee with a 100% dividend distribution to all households and a border adjustment to level the playing field for U.S. businesses. It is the most effective, efficient and equitable of any carbon pricing system that would be acceptable to a majority of Congress.

**Effective** in reducing economy-wide absolute emissions while supporting domestic economic growth across all sectors. Within 20 years, CF&D reduces greenhouse gas emissions 52% below 1990 levels while growing the economy and saving lives.

- Requirement for emissions monitoring and reporting, stable and predictable for small and large businesses and the stock market-providing strong incentives to shift investment to clean energy sources.
- Essential for buy-in of political decision makers across the political spectrum.
- Incentivizes participation of other countries through a border adjustment.

**Efficient** at minimizing the cost of implementation CF&D maximizes environmental, economic and social co-benefits.

- Low cost compared to other carbon pricing approaches
- Since all fossil fuel will be taxed upstream at the mine, well head or border, the system has good transparency.

**Equitable** by avoiding disproportionate burdens and protecting vulnerable populations from unjust or negative economic or environmental impacts CF&D builds economic value at the human scale for individuals and their communities.

- Ensures that lower income households are helped during shift from fossil fuels to renewable energy sources.
- Ensures economic benefit accrues across society, creating a societal buy-in for the policy.
- Provides a level playing field for business.
- Boosts small to medium minority and women owned businesses that have a smaller carbon footprint.