Citizens' Climate Lobby

Financial Impact on Households of Carbon Fee and Dividend
Local Impacts in California - District 17 — Khana

Introduction

This study on the impact to households of Carbon Fee and Dividend was funded to respond to concerns expressed by members of Congress that constituents in their district would not benefit under our proposal. Key to the concerns expressed was not only understanding how the average constituent did, but how different groups of constituents fared. Concern for low-income constituents, for instance, is common for members of both parties.
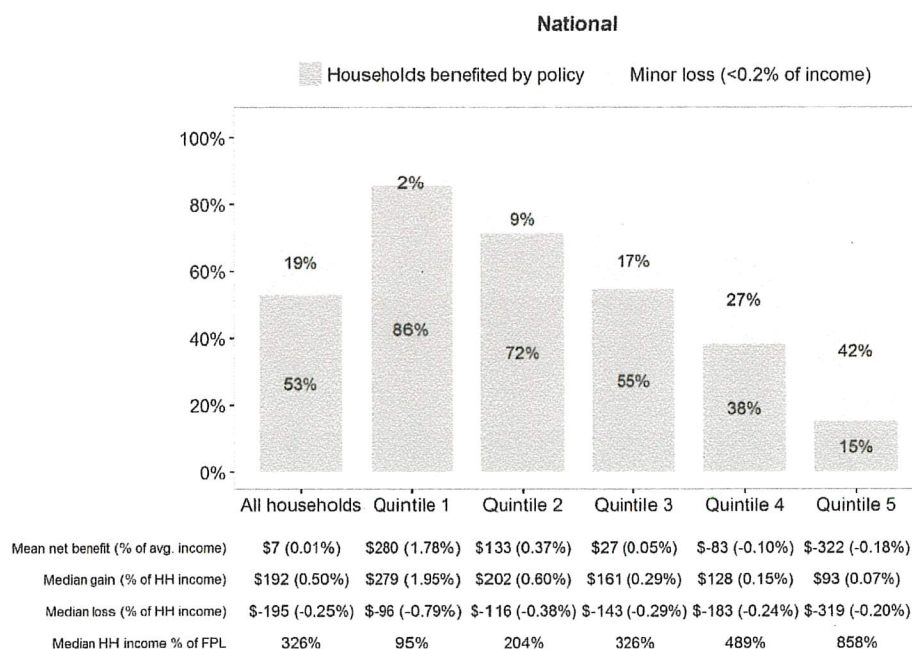
National

Households benefited by policy   Minor loss (<0.2% of income)

	All households	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Mean net benefit (% of avg. income)	$7 (0.01%)	$280 (1.78%)	$133 (0.37%)	$27 (0.05%)	$-83 (-0.10%)	$-322 (-0.18%)
Median gain (% of HH income)	$192 (0.50%)	$279 (1.95%)	$202 (0.60%)	$161 (0.29%)	$128 (0.15%)	$93 (0.07%)
Median loss (% of HH income)	$-195 (-0.25%)	$-96 (-0.79%)	$-116 (-0.38%)	$-143 (-0.29%)	$-183 (-0.24%)	$-319 (-0.20%)
Median HH income % of FPL	326%	95%	204%	326%	489%	858%

Figure 1: National Averages by Economic Quintile. Note that the three lowest-income quintiles show a benefit for the mean (average) household. The average net benefit for the lowest-income quintile is 1.78% of income, whereas households in the top quintile experience, on average, net losses that are a much smaller percentage of their total income, at just 0.18%.

California - Congressional district No. 17

Households benefited by policy   Minor loss (<0.2% of income)

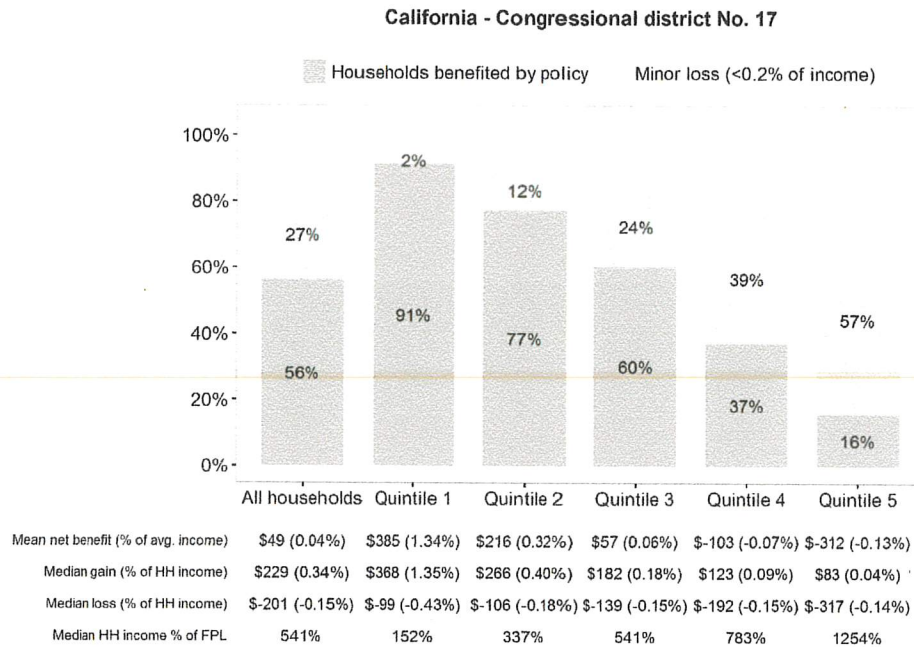|	All households	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Mean net benefit (% of avg. income)	$49 (0.04%)	$385 (1.34%)	$216 (0.32%)	$57 (0.06%)	$-103 (-0.07%)	$-312 (-0.13%)
Median gain (% of HH income)	$229 (0.34%)	$368 (1.35%)	$266 (0.40%)	$182 (0.18%)	$123 (0.09%)	$83 (0.04%)
Median loss (% of HH income)	$-201 (-0.15%)	$-99 (-0.43%)	$-106 (-0.18%)	$-139 (-0.15%)	$-192 (-0.15%)	$-317 (-0.14%)
Median HH income % of FPL	541%	152%	337%	541%	783%	1254%

Figure 2: Impact by Quintile for California - District 17. Looking at the categories on the bottom of this graph, only the numbers for "Mean Net Benefit" and "Median HH income % of FPL" include all households in a given quintile (FPL = Federal Poverty Line). Only those households who receive a financial gain are included in calculating the "Median Gain" figures, and likewise, only those households which experience a loss are included in calculating the "Median Loss" figures.

California - Congressional district No. 17

Households benefited by policy   Minor loss (<0.2% of income)

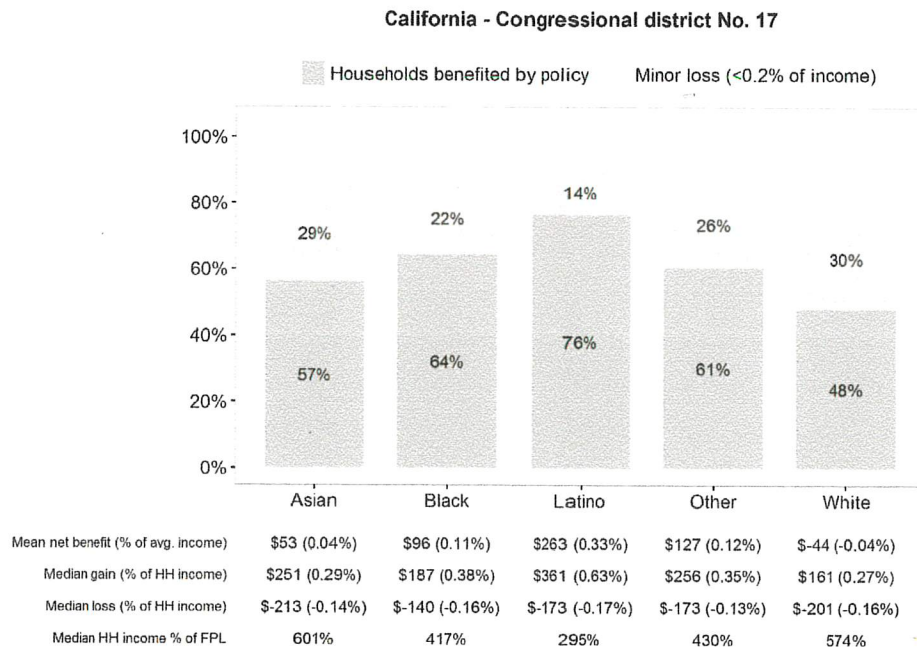|	Asian	Black	Latino	Other	White
Mean net benefit (% of avg. income)	$53 (0.04%)	$96 (0.11%)	$263 (0.33%)	$127 (0.12%)	$-44 (-0.04%)
Median gain (% of HH income)	$251 (0.29%)	$187 (0.38%)	$361 (0.63%)	$256 (0.35%)	$161 (0.27%)
Median loss (% of HH income)	$-213 (-0.14%)	$-140 (-0.16%)	$-173 (-0.17%)	$-173 (-0.13%)	$-201 (-0.16%)
Median HH income % of FPL	601%	417%	295%	430%	574%

Figure 3: Impact by Race for California - District 17. Minority households tend to do better than white households as a result of lower average incomes (associated with lower carbon footprint) and/or more people per household (larger pre-tax dividend).
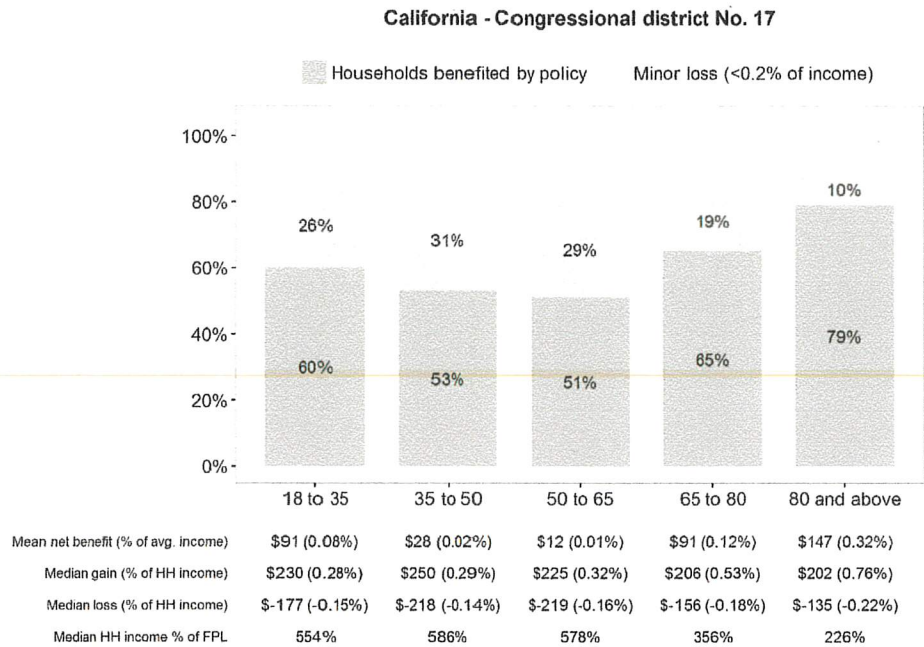
California - Congressional district No. 17

Households benefited by policy   Minor loss (<0.2% of income)

	18 to 35	35 to 50	50 to 65	65 to 80	80 and above
	26%	31%	29%	19%	10%
	60%	53%	51%	65%	79%
Mean net benefit (% of avg. income)	$91 (0.08%)	$28 (0.02%)	$12 (0.01%)	$91 (0.12%)	$147 (0.32%)
Median gain (% of HH income)	$230 (0.28%)	$250 (0.29%)	$225 (0.32%)	$206 (0.53%)	$202 (0.76%)
Median loss (% of HH income)	$-177 (-0.15%)	$-218 (-0.14%)	$-219 (-0.16%)	$-156 (-0.18%)	$-135 (-0.22%)
Median HH income % of FPL	554%	586%	578%	356%	226%

Figure 4: Impact by Age Group for California - District 17. The pattern of benefits across age groups makes sense given the impact of age on both carbon footprints and dividend received. Older households tend to have smaller footprints, reflecting reduced mobility and less consumption as a result of low fixed incomes. Younger households tend to be larger – and therefore benefited by the dividend formula – in addition to less income/consumption in early career.
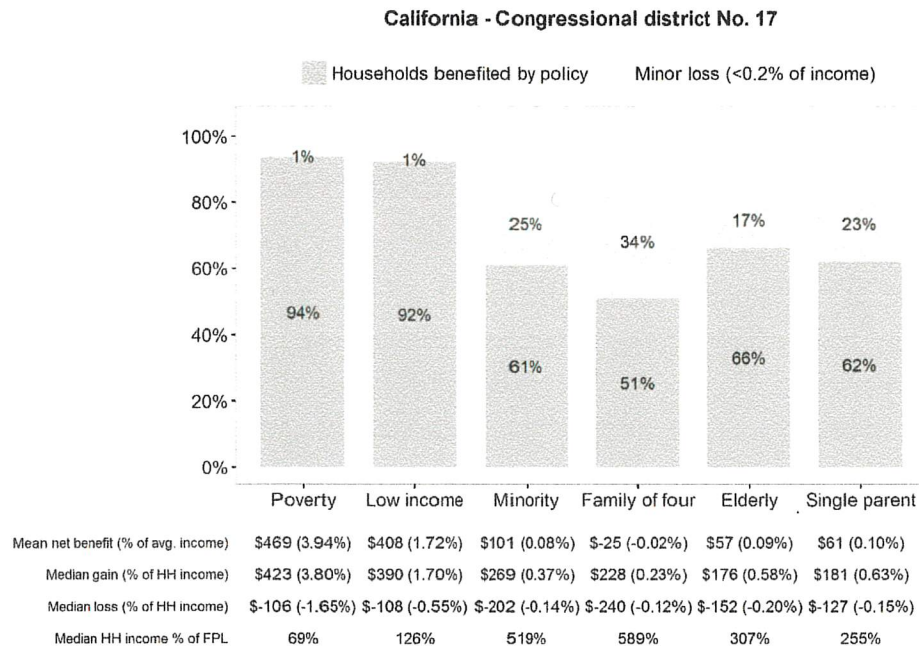
California - Congressional district No. 17

Households benefited by policy   Minor loss (<0.2% of income)

	Poverty	Low income	Minority	Family of four	Elderly	Single parent
	1%	1%	25%	34%	17%	23%
	94%	92%	61%	51%	66%	62%
Mean net benefit (% of avg. income)	$469 (3.94%)	$408 (1.72%)	$101 (0.08%)	$-25 (-0.02%)	$57 (0.09%)	$61 (0.10%)
Median gain (% of HH income)	$423 (3.80%)	$390 (1.70%)	$269 (0.37%)	$228 (0.23%)	$176 (0.58%)	$181 (0.63%)
Median loss (% of HH income)	$-106 (-1.65%)	$-108 (-0.55%)	$-202 (-0.14%)	$-240 (-0.12%)	$-152 (-0.20%)	$-127 (-0.15%)
Median HH income % of FPL	69%	126%	519%	589%	307%	255%

Figure 5: Impact by Household Type for California - District 17. This graph reports data for demographic groups of particular interest to many legislators. "Elderly" households are defined as having a household head age 65 or older, no more than two adults, and no children present. "Poverty" and "Low income" refer to households with income below 100% and 200% of FPL, respectively.
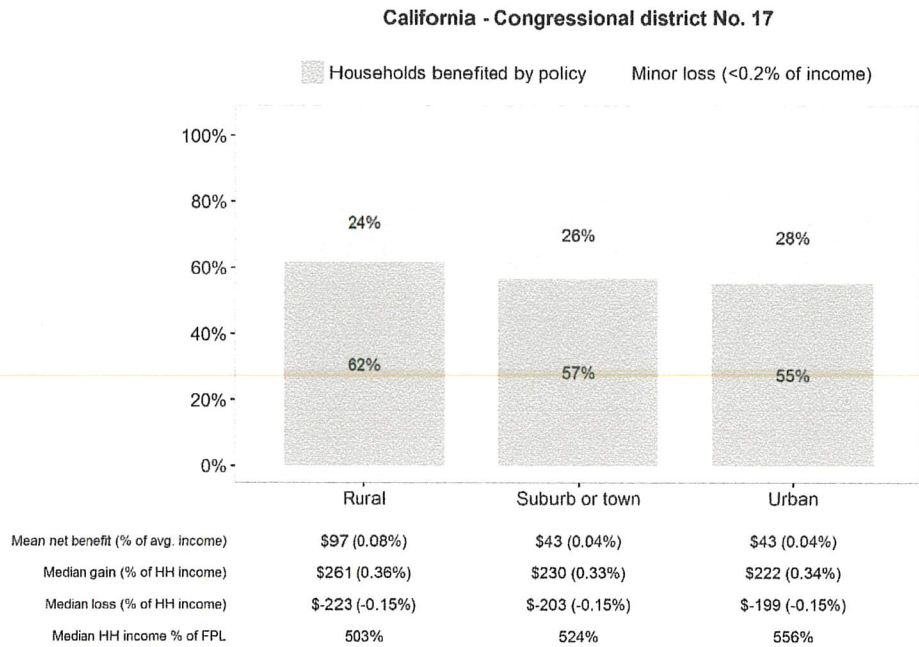
California - Congressional district No. 17

	Rural	Suburb or town	Urban
Mean net benefit (% of avg. income)	$97 (0.08%)	$43 (0.04%)	$43 (0.04%)
Median gain (% of HH income)	$261 (0.36%)	$230 (0.33%)	$222 (0.34%)
Median loss (% of HH income)	$-223 (-0.15%)	$-203 (-0.15%)	$-199 (-0.15%)
Median HH income % of FPL	503%	524%	556%

Figure 6: Impact by Community for California - District 17. This graph breaks down data by "community type" – Rural, Suburb or Town, vs Urban.
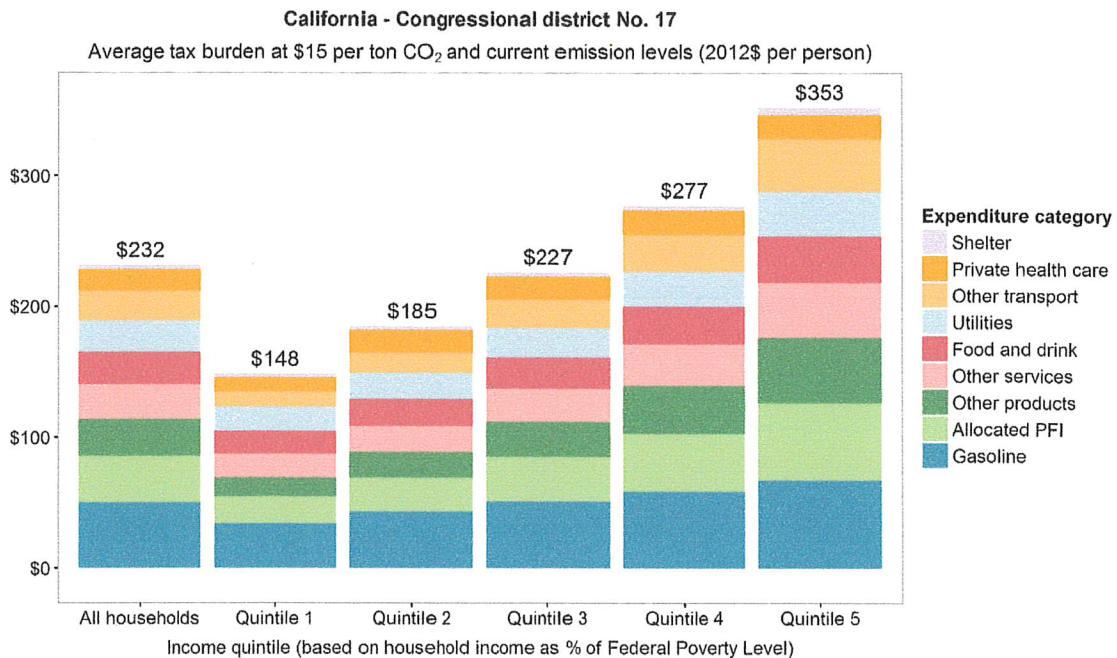
Figure 7: Expenditures by Category for California - District 17. Here we show a breakdown of where the carbon fee increases expenses (i.e. before the dividend) for each quintile. Note that direct energy expenditures (gasoline and utilities) represent less than half of the expense for most quintiles with other products and services making up the rest. Quintile 1 shows low expenditure for private health care since most health care for households in this quintile is covered by government programs. Allocated Private Fixed Income (PFI) measures economy-wide spending on fixed assets (e.g. structures, equipment, software, etc.) that are used in the production of goods and services.
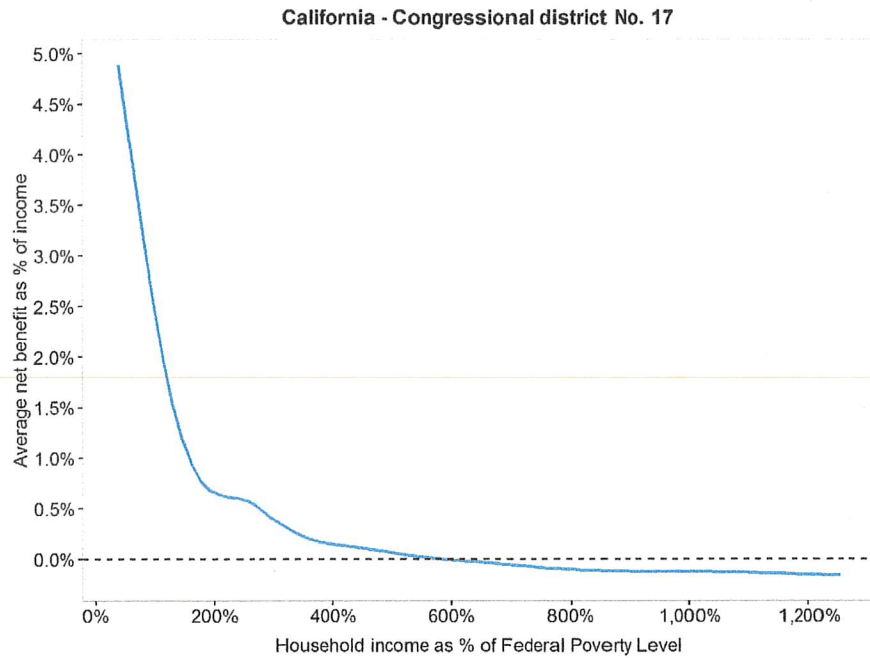
California - Congressional district No. 17

Figure 8: Relationship between benefit and income for California - District 17. This line graph shows the relationship between income expressed as a percentage of the Federal Poverty Level (FPL) vs. the average (mean) benefit as a percentage of income for households. Benefits are highest for those at the lowest income levels and generally positive through 200-300% of the FPL. Average loss for those with higher incomes is relatively small as a percentage of annual income. To avoid anomalies from small sample size at the margins, this graph does not include results for households in the bottom 1% of income, nor those above the 90th percentile of income in the district. This graph also does not convey information about how much of the population in the district is at any given point along the line.