

egional REMI Summary for the East North Central (ENC) Region (Illinois, Indiana, Michigan, Ohio, Wisconsin)

 National Highlights in 2025:
 2.1 million more jobs with Fee and Dividend (F&D).
 CO2 emissions 31% below 1990 levels.
 \$80 - \$90 annual billion increase in GDP.



Figure 1: Gross Regional Product (GRP) Changes in the Nine Regions (p. 21). ENC has the second-largest increase in GRP after 10 years (to \$19 billion annually; p. 83 of the main report), and is virtually tied for first with the Pacific region at \$27.7 billion annually after 20 years. [Note: all numbers for this graph, and all graphs, are relative to the baseline \$0 carbon fee scenario in the models]

2025: Top 3 Industry Winners (GRP)2025: Top 3 Industry Losers (GRP)1) Real Estate (+\$3.7 billion (b) to GRP)1) Petrol. and coals manufacturing (-\$2.1b)2) Ambulatory Health Services (+\$3.3b)2) Utilities (-\$2.0b)3) Retail Trade (+\$3.1b)3) Air transportation (-\$1.1b)Net of all industries in 2025: +\$19 billion to regional GRP.

Count of the industries considered in 2025: 43 add to and 24 subtract from GRP.





Figure 2: Regional breakdown of employment increases (p. 20). ENC is a leading region for job growth throughout the policy, gaining 612,000 jobs by 2035 (p. 83); the largest of any region.

2025: Top 3 Job Winners 1) Real Estate (+52 thousand (k) jobs) 2) Ambulatory Health Services (+45k) 3) Construction (+38k)

<u>2025: Top 3 Job Losers</u>
1) Oil and gas extraction (-4k)
2) Mining (not oil and gas) & Air transp. (-3k)
3) Utilities & Scenic and sightseeing transp.; Support activities for transp. (-2k)

Net of all industries in 2025: +412,000 jobs. Count of the industries considered in 2025: 42 add jobs, 8 lose jobs, 17 have no change.



Figure 3: Electrical Power Generation (p. 81). ENC remains a leader in power generation, with the F&D rapidly pushing development of wind resources up in time and scale (p. 81). This growth of wind comes at the expense of coal, which also explains why ENC accounts for the most



Real Income:



Figure 4: Real Income Per Capita (p. 38). This reflects the increase in income per person after accounting for increased cost of living (up by 1.8% in 2025; p. 33), increased energy prices (peaking in 2026; p. 34), net of the impact to the labor market, F&D checks, as well as population and demographic trends. For instance, ENC is about neutral throughout, but this is partly explained by the large population increases in this region as a result of the policy (+600,000 by 2025; p. 44). Also worth noting is that the inflation over the entire 20-year period for the region is equivalent to adding one "extra" year of average annual inflation.

Other notable findings:

The biggest growth occupations for the region in 2025 are retail sales workers (+30,000), construction trades workers (+24,000 jobs), health diagnosing and treating practitioners (+23,000 jobs), and food and beverage service workers (+24,000 jobs). The job gains in any one of these industries is more than double the job loses in the three hardest-hit sectors combined. These occupations are winners because of the dividend, which boosts consumer spending, and thus results in job gains in labor-intensive industries. While many of these jobs are entry-level, they beat unemployment, and indeed the poorest 20% of Americans see the largest boost in employment (p. 36).

Conclusions:

Despite the loss of \$5 billion in coal and related industries, the region still has a net gain of \$19 billion, a net increase in jobs, and a substantial increase in population. The loss of 4,000 oil and gas jobs is outweighed by the 5,000 jobs added in Motor vehicles, bodies and trailers, and parts manufacturing alone. Losses due to fewer coal plants are more than offset by growth in other industries, and this region has more lives saved than any other due to decreased pollutant emissions. Fee and Dividend is a clear winner for ENC!

Full report: <u>http://citizensclimatelobby.org/wp-content/uploads/2014/06/REMI-carbon-tax-report-62141.pdf</u>

Revision 2: Feb. 17, 2015