Argonne’s JOBS tools quantify how deploying transportation energy infrastructure creates jobs and “ripple effect” economic activity.

Transportation technologies change and grow, and so do the jobs they support. When we invest in developing transportation fueling infrastructure—such as for the planning, manufacture, installation and operation of equipment—employment, earnings and economic output rise. This is true for the industries that supply equipment as well as for the industries in their supply chains. Moreover, employment, earnings and economic output also increase when earnings related to these activities re-enter the economy (“ripple effect”). That spending supports even more service and support industries, which further adds to the economic impact of the infrastructure itself.

Argonne’s team of experts evaluates how existing and emerging fuel technologies, including electric batteries, natural gas, hydrogen and stationary fuel cells, affect economic systems. The JOBS EVSE tool, for example, measures the economic impact of electric vehicle charging based on the electric vehicle supply equipment (EVSE) deployed at the station. Expenditures are translated into dollar flows among industries using the U.S. Department of Commerce’s RIMS2 input-output model.

This tool, as well as others from Argonne, is built on data from installers and developers, EVSE network providers, utilities, equipment manufacturers, site planners, U.S. Department of Energy (DOE)—designated Clean Cities coalitions, analysts and researchers. Collectively, these tools offer what decision-makers need to estimate the economic impact—on jobs, local economies and industries—of proposed alternative fueling installations.

THE IMPACT
Argonne’s approach examines the full economic impact of transportation energy infrastructure. It considers supply chain jobs (those directly or indirectly producing, shipping, installing, constructing and operating fueling infrastructure) and “induced” jobs (created when supply-chain job holders re-spend wages), earnings and economic output (money spent across the economy). The result: a more complete picture of transportation fueling infrastructure’s impact on employment and economies.

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