

OVERVIEW

California's goods movement industry has already invested billions in cleaner technologies, lower-carbon fuels, and more efficient operations. Those efforts have produced real, measurable emission reductions over the past decade — long before the WAIRE Program was created.

The Ramboll study, commissioned by the Supply Chain Federation, examined whether WAIRE and similar Indirect Source Rules (ISRs) were effective in reducing emissions. The conclusion: WAIRE has not delivered the promised benefits and, in some cases, may actually make pollution worse.

Instead of layering on costly regulations that push jobs and businesses out of California, policymakers should build on proven strategies — setting reasonable emission standards, incentivizing cleaner fuels, and encouraging innovation in the supply chain.

KEY FINDINGS



Industry investments before WAIRE reduced emissions.

- Companies adopted cleaner trucks, equipment, and fuel well before WAIRE took effect.
- Major retailers and logistics companies have been at the forefront of zero- and near-zero-emission technologies.



The benefits claimed are overstated.

- Reported gains are largely attributable to existing state programs like the Low Carbon Fuel Standard and the Advanced Clean Trucks rule—not WAIRE itself.



No recognition from the EPA.

- The Biden EPA declined to award WAIRE any emission-reduction credits, signaling federal regulators do not view it as an effective policy tool.



Costs are excessive.

- Compliance costs are 3 to 9 times higher than initially estimated.
- These costs flow directly to consumers in the form of higher prices on everyday goods.

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WHAT HAS WORKED?

- ✓ **Reasonable emission standards** that allow businesses time to plan and comply.
- ✓ **Incentives for lower-carbon fuels**, clean trucks, and charging/fueling infrastructure.
- ✓ **Public-private collaboration** that balances environmental goals with economic realities.
- ✓ **Voluntary industry programs** which have already achieved substantial reductions without harming jobs or competitiveness.

MISCONCEPTION VS. REALITY

Misconception: WAIRE
reduces emissions.



Reality: ISRs may actually increase pollution by
pushing warehouses and jobs out of the region.

When companies relocate to avoid high compliance costs, goods must travel farther. That means longer truck routes and more emissions overall—defeating the very purpose of the rule.

ECONOMIC IMPACTS

1

JOB LOSSES:

Higher costs put warehouse jobs at risk, particularly in working-class communities that depend on logistics employment.

2

HIGHER CONSUMER PRICES:

Every added cost in the supply chain ultimately raises prices for families, from groceries to household goods.

3

REDUCED INVESTMENT:

Businesses are discouraged from expanding or upgrading facilities in California.

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Findings of the Ramboll Study on WAIRE and Indirect Source Rules (ISRs)

Commissioned by the Supply Chain Federation

BOTTOM LINE

WAIRE and ISR-style mandates do not solve pollution—they shift it somewhere else. They threaten jobs, increase costs, and risk making air quality worse by relocating emissions outside California.

The better path is to build on what works:

- Transparent and achievable standards
- Incentives for innovation and clean technology
- Industry-led solutions that deliver real results without crippling California's supply chain

ABOUT THE SUPPLY CHAIN FEDERATION

The Supply Chain Federation is a coalition of logistics companies, warehouse operators, and goods movement partners dedicated to building a cleaner, more resilient, and more efficient supply chain in California. The Federation advocates for practical, science-based solutions that protect jobs, keep goods moving, and reduce emissions through innovation rather than costly, ineffective mandates.

ABOUT RAMBOLL

Ramboll is a global engineering, design, and consulting firm with more than 18,000 experts worldwide. With deep expertise in sustainability, energy, and environmental research, Ramboll provides independent, data-driven analysis to help governments, industries, and communities develop effective climate and infrastructure solutions. Ramboll's findings on WAIRE highlight the importance of evidence-based policymaking that balances environmental progress with economic sustainability.

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