

## Eliminating Energy Costs And Carbon Footprint

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Video of Carbon Lighthouse: Clean Energy Works for Us

The experts at [Carbon Lighthouse](#) [1] are working together with industrial and commercial facilities to reduce emissions and dramatically save on energy costs. Their first mission is to serve the environment, they do that by finding and delivering solutions that create financial benefits for clients and move them closer to becoming carbon neutral. President and Founder, Raphael Rosen, answered a few questions about the organization and their services.



### What Provokes A Facility To Bring You In?

We are called in when industrial facilities realize the potential in reducing energy costs but are unsure of how to tackle the challenge. Regulatory forces are not yet a direct driver but may be in the future. Most importantly, I think our mission of profitable carbon neutrality resonates with a lot of industrial plant owners who would like to reduce their environmental impact but don't have the time, know-how, or capital to do so. We come in and help them with all that without impacting or taking off-line their daily operations.

Industrial projects make up about 20% of Carbon Lighthouse projects and continue to be an important facet in our efforts. Our projects range from sophisticated air compressor controls retrofits to simply lighting retrofits and we are working on a number of very cost-effective distributed generation solar pv projects. Using detailed data analysis our experts can uncover operational inefficiencies even in the latest and greatest equipment.

### Can You Tell me About The Evaluation Process?

The first step of our process is a simple walk through to assess the facility. The

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second step is our data collection and analysis phase, in which we use our proprietary platform to collect about 1000x more energy data than is usually available in a plant to identify a host of possible energy solutions. The third and final step is implementation and savings assurance in which we implement energy upgrade projects and then commission the projects to ensure savings are being achieved.

## What Kinds Of Solutions Do You Recommend?

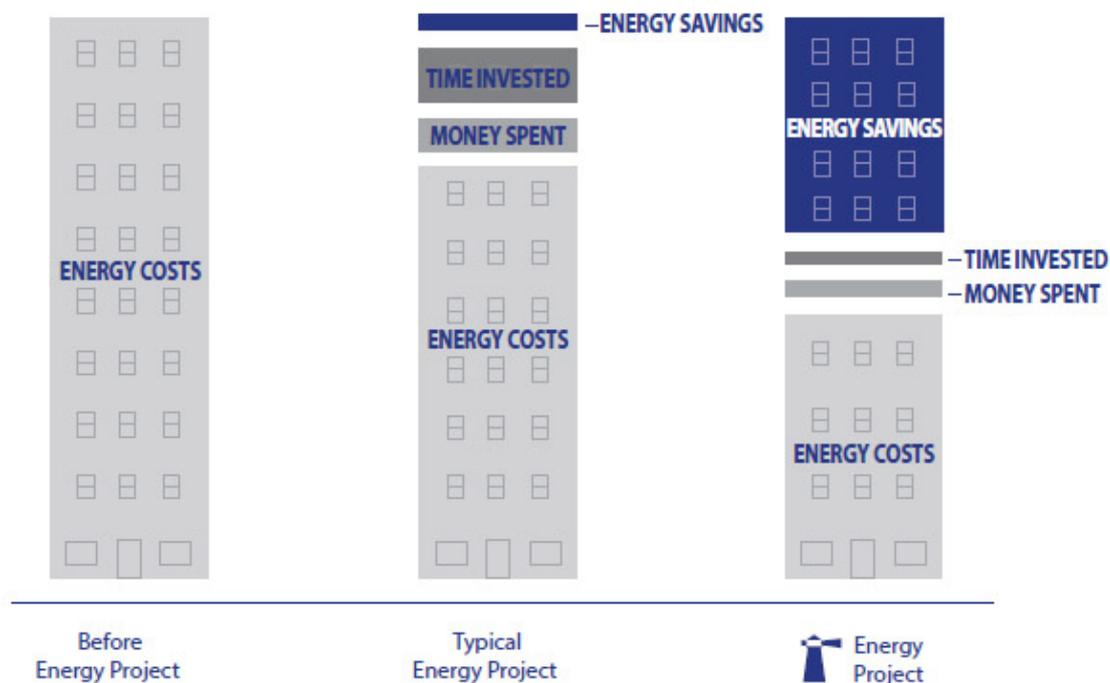
It's highly variable by facility and client needs, which is part of why we avoid a one-size-fits-all approach. There might be opportunities in process equipment, air compressors, ammonia compressors, cooling towers, boiler plants, lighting and more. We use the data we gather to inform which projects will deliver the most savings for the lowest costs. Sometimes we install new capital equipment. More often, we implement new equipment controls, new relays, or improvements to existing control systems. Sometimes we patch up leaking compressed air or other lines or switch out lamps and ballasts.

## What Kinds Of Results Do You See?

On site, we typically achieve 10-20% energy and cost reductions. For whatever emissions we cannot eliminate on site, we donate some of the proceeds from projects to a non-profit that competes in the AB32 and RGGI markets. Most importantly from our perspective, we do a year-long intensive measurement and verification process to ensure the savings we deliver to our clients are delivering the promised energy and environmental savings. If our clients can't be sure they are achieving dollar savings, they aren't getting the benefits they were promised and deserve. And if we can't be sure we are achieving real environmental benefits then we are failing in our mission.

## Better Building, Better Planet

and better bottom line



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**Links:**

[1] <http://www.carbonlighthouse.com/>