



A typical automotive manufacturing facility would need to make an additional 27 cars annually to equal the money saved by switching to energy efficient direct-fired heating equipment.\*

Not only can automotive manufacturing facilities save energy by using more energy efficient equipment, but there are additional positive effects on the overall revenue and environment of the facility. By simply upgrading to LED lights, HVAC and compressed air systems, your automotive facility could see the following benefits .\*

- Staff and customer comfort, safety and satisfaction.
- Decreased maintenance costs.
- Increased staff productivity.
- Decreased equipment failure.

\* Based on a 2017 DNV GL study

"... Direct-fired heaters [increase] our ability to better maintain the desired process temperature which results in more high quality products."

- Ian Stone, Energy Manager, Ford Motor Company

Consumers Energy offers rebates, technical services and more to help automotive manufacturing facilities like yours become more energy efficient. Our team is here to walk you through the program requirements and available resources.

#### **Contact us**

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# **Automotive** Hidden Benefits of Energy Efficiency



## **Energy Efficiency Impacts in Automotive Manufacturing Facilities**

The following non-energy improvements can result from upgrading to energy efficient equipment:

#### Increased Productivity

In the automotive manufacturing industry, preventing product defects are a top priority. Installing LEDs can increase visibility and improve quality control, reducing the number of defective parts by 1 to 5%. An efficient compressed air system will stabilize the pressure and air flow to all pneumatic devices, causing them to work more consistently and reduce scrap rates.

#### Increased Safety

Employee safety in the automotive manufacturing industry is essential and installing energy efficient products can reduce the risk of accidents. LEDs improve employee visibility, minimizing the risk of slips and falls. Installing direct-fired furnaces does not overheat the steam boilers, reducing boiler failure and decreasing safety risks by up to 5%.

#### **O&M Cost Savings**

Energy efficiency investments in new equipment, system optimization or change of processes can lead to reduction in costs for maintenance by up to 5% and an additional 30 to 50% in maintenance materials.

### O&M Cost Savings

Equipment	Energy Savings	Non- Energy Savings	Total Savings	Energy Payback	Non- Energy Payback
Lighting	\$6,846	\$24,644	\$31,490	2.46 yrs.	0.54 yrs.
VFD	\$3,559	\$O	\$3,559	2.11 yrs.	2.11 yrs.
Compressed Air	\$3,202	\$92	\$3,293	2.47 yrs.	2.40 yrs.
HVAC & Heating Equipment	\$54,407	\$O	\$54,407	2.50 yrs.	2.50 yrs.



1. Ford Motor Case Study. DNV GL.

2. Nexteer Case Study. DNV GL.

3. Capturing the Multiple Benefits of Energy Efficiency. (2014). IEA.