# Adopting electric vehicles and sustainable fleet strategies

CO<sub>2</sub>

A tool for building a business case for the creation of a more environmentally friendly and efficient fleet.



# Overview

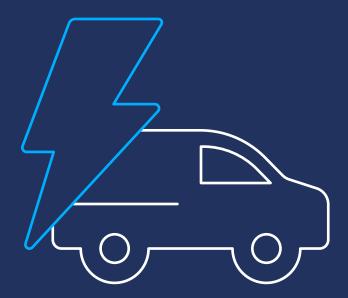
In an effort to combat climate change, governments and business leaders around the world are taking steps to transform the way they operate.

Creating a more sustainable fleet takes time, planning and proper budgeting in order to be successful. With emission mandates and regulations approaching it is essential that fleets begin taking these steps as soon as possible.

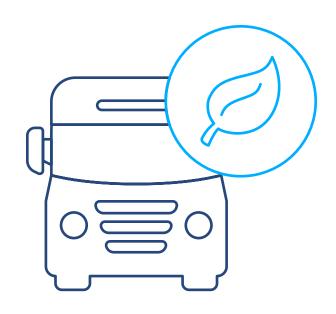
This workbook will help you create your own business case in order to start adopting electric vehicles and sustainable fleet strategies.

### How to use this workbook

We have created this document to help you build your own business case for adopting sustainable fleet strategies. It contains examples of how fleets have successfully implemented sustainability strategies using data-driven insights from Geotab. Use the fillable boxes to brainstorm your ideas and help you build your case.



# **Table of Contents**



# **Creating an executive summary**

Create an overview of your objectives, the current challenges you need to overcome, which sustainable strategies you want to employ, the benefits of implementing these strategies and the opportunity costs if you don't. Although the executive summary appears first in the business case, it is often helpful to write it last.



What are the main points you want to convey right off the top?

# Establishing objectives and addressing challenges



Provide your overarching goals and explain what is the driving force behind the need to implement these strategies.

### Objectives

Explain what you hope to accomplish by implementing these strategies and explore any possible risks for not implementing them. For example, non-compliance with government mandates resulting in fines or breach of contract.

#### FOR EXAMPLE

- Transition to an allelectric fleet by 2035 in order to comply with state government mandates
- Reduce CO<sub>2</sub> emissions by 15% over the next
  7 years to align with company ESG targets
- Reduce annual fuel consumption by 5% over the next 7 years to lower operational costs

### Challenges

Present your reasons why you need to adopt new strategies and list any potential issues or concerns. Explain why you are unable to meet these objectives using your current methods or other expected hurdles.

#### FOR EXAMPLE

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- Disparate data sources is currently causing confusion
- Opportunity to pilot EVs ahead of mandates in order to learn and scale successfully when they come into effect
- Existing driver and maintenance training programs do not address electric vehicles

# Highlight your chosen sustainable fleet strategies

Depending on your specific goals and situation there are a number of sustainable fleet strategies you can implement. Below are a few examples of some of the strategies fleets have implemented.

### **Idle reduction**

Explain how you will establish a baseline level, the approach you will take to reduce idling and its impact.

How much are you idling currently? How much fuel is consumed? What are the environmental and financial impacts?



#### SUCCESS STORY

Orkin was looking for ways to reduce emissions and wanted to focus on idling, which they estimated was costing them over \$1 M a year. They already had a 20-minute idling rule in place and drivers would receive an audible in-cab alert if they were approaching that threshold. In order to address idling further they implemented a contest for their drivers. The driver with the lowest overall idling, during a three month period, won a cruise package.

The results? They reduced total idle time 8.4% compared to the previous year and the most improved driver cut their idle time by 99.5%. In fact, their month-over-month idling was lowered, even though their fleet size had increased.

### **Route optimization**

Define how you will reduce emissions by ensuring that your vehicles are always taking the most efficient route.

Describe how you can consolidate routes or avoid traffic congestion.



### ferrovial services

#### SUCCESS STORY

Ferrovial Servicios' waste management fleet was looking for a way to optimize their operations. They utilized data from weight sensors, weather and driving data to create more efficient routes. In the end they were able to reduce the overall number of routes, helping them cut costs and become more sustainable.

### **Rightsizing your fleet**

Describe how you will optimize the use of your vehicles, ensuring your fleet consists of the fewest and most efficient vehicles necessary to complete its daily tasks.

Do you have underutilized vehicles? Discuss how you will maximize the use of the most efficient vehicles.



### **Madrid City Council**

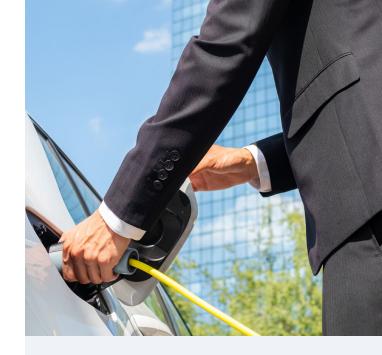
#### SUCCESS STORY

As a part of a European research project, the Madrid City Council used Geotab telematics in order to better understand the utilization of the electric vehicles (EVs) in their fleet. They were able to rightsize their fleet and reduced their CO<sub>2</sub> emissions by 60%.

### **Fleet electrification**

Outline your plan for incorporating electric vehicles into your fleet, including results from running an <u>EV Suitability</u> <u>Assessment</u>, that showcases your electrification potential.

Determine which vehicles make the most sense to electrify first and explain the potential savings from their lower TCO.





#### SUCCESS STORY

Enterprise Fleet Management conducted an EVSA of over 91,000 vehicles in their fleet. They found that roughly 45% of the analyzed vehicles could be replaced with an EV. This transition would result in 1.3 million tons of avoided tailpipe emissions and a cost saving of \$167 million or \$4,056.20 per vehicle.

# **Communicating costs**

Provide budgetary needs and outline resource requirements.



### **One-time and ongoing costs**

When presenting the cost of implementing these sustainable fleet strategies it is important to differentiate between upfront costs and ongoing expenses. Many of the benefits from becoming more sustainable occur over the lifetime of the vehicles and there can be some misunderstandings when implementing new strategies or technology.

#### **One-time costs**

What are the initial and one-time costs associated with this project?

#### FOR EXAMPLE

• The installation of EV charging equipment and infrastructure

- · New vehicle procurement
- Consultancy fees

#### **Ongoing costs**

What are the ongoing costs associated with this project?

#### FOR EXAMPLE

- Enhanced telematics subscription
- Vehicle lease
- Utility costs (electrification)

- Training costs (ongoing driver training)
- Rewards programs (driver behavior/eco-driving)

### Internal and external resources

Financial costs are not the only things to consider when creating a business case. There will be other stakeholders involved in this process and it is best to declare them early on in the process to avoid any delays or confusion.

#### **Internal resources**

Who do you need support or buy-in from internally?

#### THIS COULD INCLUDE

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- Board of Directors
- Fleet manager
- Acquisition manager
- Maintenance manager

#### **External resources**

Who outside of your organization needs to be involved?

#### FOR EXAMPLE

- ••••••
- Electric utility
- Charging manufacturers
- Service companies

# **Communicating results**

Identify what success looks like and explain how you will be reporting it to the stakeholders.



### Reporting the tangible and intangible benefits

You should lay out the main data points you are going to use to define for success. This will most likely include: vehicle lifetime savings (based on TCO), avoided carbon emissions  $(CO_2)$  and reduced fuel consumption. Analyze fleet performance, identify opportunities for improvement and set a new goal or target with the <u>Green Fleet Dashboard</u>.

It is easy to highlight some of the more factual benefits of becoming more sustainable, such as financial savings. However some of the less quantifiable benefits can be just as important.

#### **Tangible benefits**

What are the main data points you will be measuring? When creating the list, place them in order of importance.

#### FOR EXAMPLE

• Avoided carbon emissions (tons)

- Reduced fossil fuel consumption (USG)
- Vehicle lifecycle savings from reduced TCO (USD)
- Time spent idling (hours or % of time)

#### **Intangible benefits**

Explain some of the intangible benefits of implementing sustainable fleet strategies.

#### FOR EXAMPLE

Improved employee morale

- Increased driver retention
- Enhanced brand image

## **Project timelines**

Finally, establish a timeline and the milestones for implementing these sustainable fleet strategies. It is important to break down this project into smaller, more manageable phases.



#### Milestones

List out key targets or dates to be completed to track progress.

#### FOR EXAMPLE

· Baseline data collected

- Pilot program complete
- Sustainable strategy fully implemented

#### **Reporting success**

Define how you will be reporting status updates to leadership.

#### FOR EXAMPLE

• Weekly status update on strategy implementation

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- Quarterly reporting on reduced fuel consumption
- Annual report on percentage of fleet replaced with EVs

Notes



Now that you have completed the workbook, it is time to summarize the key points of each section for your executive summary on page 5

# GEOTAB.

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