

Measurement Scenario

Routes to a greener future
Towards more sustainable freight transport



Main menu

The freight industry in the 21st century 5 mins

Responses
10 mins per case

Conclusion
5 mins

Links

Relevant legislation
Sources of loans and grants
Accreditation bodies
Other useful links
Glossary`



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Main menu

- The freight industry in the 21st century - Impacts and Risks**
10 mins
- Responses**
10 mins per case
- Conclusions**
5 mins
- Links**
Relevant legislation
Sources of loans and grants
Accreditation bodies
Other useful links
Glossary`

Responses – case studies

- Implement new technologies
- Think about modal shifts
- Optimise utilisation
- Consider supply chains
- Cooperate/collaborate

Metrics

- Make a start

Navigation arrows: ◀ ▶

The learner clicks on "Responses" to see a list of the scenarios they can work through.

In the final application the developer will source as comprehensive set of links and provide urls.

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Metrics case study - introduction

This case study is about implementing effective measurement.

Effective metrics allow performance - and progress - to be charted. Increasingly, each party in the supply chain, as well as end consumers, will require effective and transparent measurement of sustainable activity.

What gets measured gets done!

[Click here to start.](#)



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An unwelcome phone call

You've recently been appointed as Regional Manager for Speedy Logistics, a medium-sized transport company.

On your third day in the new job you receive an unwelcome phone call from an important client...



Click the phone...

[spoken audio] Hi – it's Kurt Andreesen from BlgCo. I've just come out of a fantastic presentation from EcoLogistics about their sustainability plan. Could you give me a similar presentation please – as soon as possible. We're reviewing contracts and this will be a factor in our decision making.



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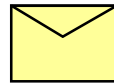
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Do you have a sustainability plan?

It is important to your company to retain this client. Having only recently been appointed, you are unclear about Speedy Logistics' sustainability plans. You search your department's files and find nothing of use. So you email a number of colleagues. Only Jon Wallace, your Finance Director replies...

Click the mail...



Our approach to sustainability is simple: our number one priority is keeping costs down for our customers, and making sure things arrive on time. That way we all stay in business!


If you are going to take any other approaches to sustainability, come and talk to me immediately. I'll need to be persuaded in business terms.

Good luck!

The image shows a yellow envelope icon on the left. Dashed lines connect the envelope to a rectangular window on the right. The window has a blue header bar and a small square icon in the top right corner. The text inside the window is the email content.

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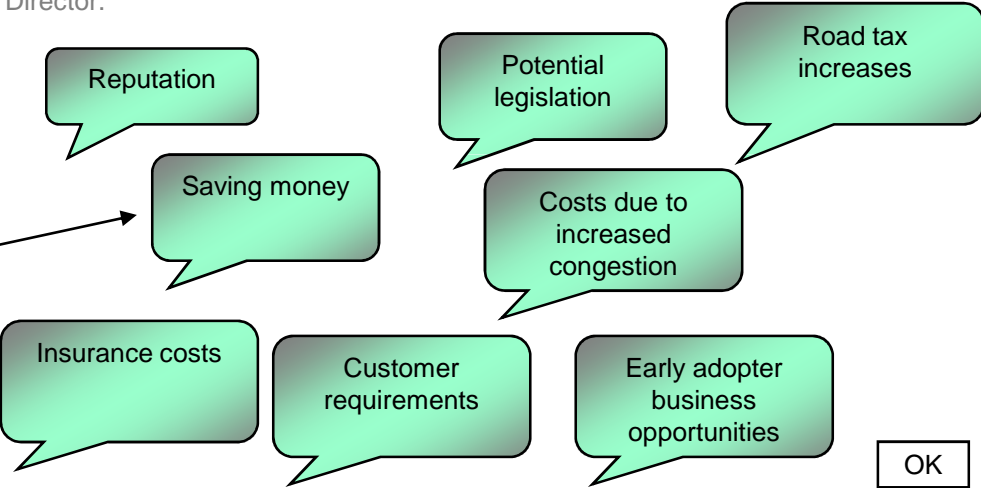
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Putting the case for a sustainability plan


You are concerned that not having a sustainability plan might become an issue with other clients. You decide to go to see your Finance Director. But first you need to prepare and prioritise your arguments.

Select the top **four** arguments your will talk through with your Finance Director.



Each speech bubble expands to provide fuller explanations when the user rolls the cursor over them. For example “saving money” expands to: “Procedures that help the environment also save money. So having a strategy could put the company at a competitive advantage as well as reducing costs.”

OK



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Potential consequences

Your priorities aren't bad. But you've missed some important points. Here's what could happen...



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Putting the case for a sustainability plan – continued...

Having seen a range of possible consequences, you might want to adjust your arguments...or you can keep your selections.

Select the top **four** arguments your will talk through with your Finance Director.

Reputation

Potential legislation

Road tax increases

Saving money


Costs due to increased congestion

Insurance costs

Customer requirements

Early adopter business opportunities

OK



Each speech bubble expands to provide fuller explanations when the user rolls the cursor over them. For example “saving money” expands to: “Procedures that help the environment also save money. So not having a strategy can offer competitive advantage – and save money.”

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The case for a sustainability plan – commentary

Here are brief summaries of the issues relating to each argument. Your final selections are highlighted.

Reputation

Saving money

Insurance costs

Customer requirements

Costs due to increased congestion

Potential legislation

Road tax increases


Early adopter business opportunities

There is some evidence that good sustainability practice saves money. For example...Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer lobortis accumsan orci. Aenean feugiat consectetur eros. Duis luctus scelerisque justo. Donec odio. Nulla facilisi.



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Success! So what to do first?

You meet with your Finance Director and are pleased to find he is convinced by your arguments. He talks to the board and they commission you to produce a sustainability plan. They instruct you to focus on actions that provide *immediate benefits*, and which are *measurable*. You start making a rough list...


Drag the items on the left that you think are relevant onto your rough list.

- Regular driver training
- Publish emissions data
- Tyre pressure checks
- Impose driving speed restrictions
- Improve vehicle loading ("cubing out")
- Replace fleet
- Check vehicle sizes
- Use low-blend biofuels

Short-term actions:



OK



The user drags items onto their rough list. If the items are wrong, they will "bounce" back to where they started, so that wrong answers cannot appear on the list. The user can hover the mouse cursor over each item to read short summaries of the issues relating to each of these areas, before they make their decisions. However, these summaries will not directly say which areas are likely to be most/least effective, or viable in the short-term. For example, hovering over "Improve vehicle loading" would expand to "Vehicle schedules should be arranged to ensure maximum loading by both weight and volume".

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Success! So what to do first?

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- **Replacing fleet** could make a significant difference, but it is likely to be expensive.
- **Speed restrictions** may help, but low average speed does not necessarily help. For example, urban congestion lowers average speed.
- **Publish emissions data** – there are some rough and ready calculations tools that are free to download, but you probably need specialist advice to develop an accurate model.

Short-term actions:

Regular driver training

Tyre pressure checks

Improve vehicle loading

Check vehicle sizes


OK

The user is shown a model answer, and given feedback.



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Measurements for short-term actions

Having produced your list of immediate priorities, you need to decide how to measure each one. It isn't always obvious how to do this...

Complete each of the sentences below by selecting the most effective measure.


Tyre pressures are checked

"Cubing out" will be measured

We will give our customers feedback on the emissions we generate in transporting their goods by

Optimum vehicle size used will be measured by

OK



The user selects an option from a drop-down box to complete the sentences

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Measurements for short-term actions

Having produced your list of immediate priorities, you need to decide how to measure each one. It isn't always obvious how to do this...

Complete each of the sentences below by selecting the most effective measure.

Tyre pressures are checked

"Cubing out" will be measured by

Select an answer

Measuring volume of goods per vehicle

Monitoring kms travelled per kg delivered

Weighing vehicles

We will give our customers feedback
transporting their goods by

Optimum vehicle size used will be measured by

OK



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Measurements for short-term actions

Having produced your list of immediate priorities, you need to decide how to measure each one. It isn't always obvious how to do this...

Complete each of the sentences below by selecting the most effective measure.

Tyre pressures are checked

“Cubing out” will be measured by

We will give our customers feedback on the emissions we generate in transporting their goods by

Select an answer	▼
providing information about the specification of our trucks	
telling them how far their goods are transported	
using an emissions calculator to make comparisons between alternatives	

OK



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Questioning from the board

A few weeks later you present your recommendations to the board. Although they are broadly supportive, they are concerned about longer-term issues...

Respond to each of the board's questions. Select the best answers.

Shouldn't we be thinking about replacing our truck fleet with more modern vehicles?



Today's trucks emit virtually no Nitrogen Oxide (NOX) or particulate matter (PM), which has had a good effect on people's health. Aerodynamics have also helped reduce fuel consumption.

Electric vehicles avoid the emissions associated with diesel and petrol, though the emissions generated by producing the electricity should not be ignored.

Improvement in aerodynamics technology have helped reduce fuel consumption.

OK



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Questioning from the board

A few weeks later you present your recommendations to the board. Although they are broadly supportive, they are concerned about longer-term issues...

Respond to each of the board's questions. Select one answer for each question.

What is "smart logistics planning" all about?



It's about moving sources of supply closer to customers. This is a long-term proposition.

It's an integrated approach to planning transport. It can cut down on empty runs – for example by delivering finished goods on the outward trip and picking up raw materials for the return trip.

It's about using the latest technology in vehicles, such as aerodynamics, in order to cut fuel consumption.

OK



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Questioning from the board

A few weeks later you present your recommendations to the board. Although they are broadly supportive, they are concerned about longer-term issues...

Respond to each of the board's questions. Select one answer for each question.

Why should we consider so-called "modal shifts"?



Modal shifts may allow us to move our transport hubs in order to reduce distances.

New forms of vehicles, such as hybrids, could be used for short urban runs. Such vehicles avoid the emissions associated with diesel and petrol.

Although we have well-established transport networks in place, and these work well, there may be substantial commercial and environmental benefits in considering sustainable alternatives.

OK



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A brief interlude.

Click on each image to hear about how logistics suppliers and buyers have carried out effective measurement in some of the areas discussed in this case.



[spoken audio] Well, we measured the number of training hours using timesheets, then correlated these against changes in patterns of fuel consumption.

The user hears some real-life interviews with logistics/transport professionals who provide stories, anecdotes and tips on some of the measurement issues raised in the case.



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How SMART are your objectives?

The board supports what you are doing, so it's time to finalise your plan. You establish measurement areas and baselines. You are checking that your objectives are Specific, Measurable, Achievable, Realistic and Time-bound (SMART).

Check each of the objectives to assess whether it is SMART.

Can be achieved quickly

Likely to be easy to measure

Likely to be achievable

Is specific

Objective 1: "We will reduce our carbon emissions by at least 20% for all clients with whom we have a 3 year contract"

OK



Objectives are presented as if from a formal typed document.

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How SMART are your objectives?

The board supports what you are doing, so it's time to finalise your plan. You establish measurement areas and baselines. You are checking that your objectives are Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

Check each of the objectives to assess whether it is SMART.

- Is time-bound
- Is measurable
- Is specific
- Likely to be easy to measure

Objective 2: "We will use on average at least EURO 3 class trucks for our road transportation."

OK



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How SMART are your objectives?

The board supports what you are doing, so it's time to finalise your plan. You establish measurement areas and baselines. You are checking that your objectives are Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

Check each of the objectives to assess whether it is SMART.

- Is likely to be achievable
- Is specific
- Is relevant to the business
- Can be measured

Objective 3: "We will ask our class A suppliers to implement EMAS as this will provide independently verified information about their environmental performance."

OK



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Conclusion – the plan is complete

You have completed the plan – and here it is. Read through the executive summary, then when you are happy with it, click “mail”, to send it to Kurt Andreesen at BigCo.

Click “mail” when you are ready.

SpeedyLogistics – sustainability plan

Executive summary

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mail



The user either reads a mocked-up document on screen, or clicks on a link to download a pdf version of a model answer. They do not have to create or write a response – the “mail” button is simply a means of navigation.

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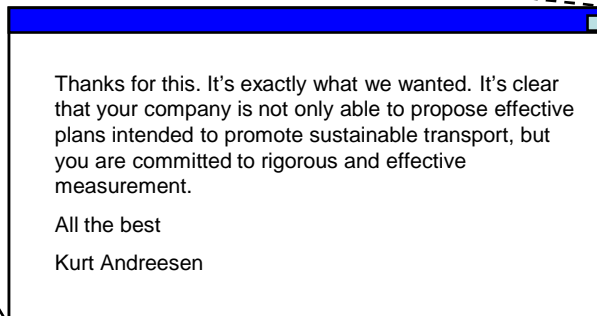
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Positive responses

A few hours later, you receive an email from your client.

Click the mail...



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More positive responses!

It's three months later. Your phone rings...

Click the phone...



[spoken audio] Hi – it's Jon Wallace from Finance. Just thought I'd report back on what's been happening since we published our sustainability plan. The cost savings on fuel have been noticeable, and we think it's because of driver training. We're just correlating the data. And our capacity utilisation has improved markedly as well. We're finding that ...



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Conclusion and further information

That's the end of this scenario. It took you through a typical sequence of planning and developing a sustainability plan. The main areas covered were:

- Objective setting
- Measurement areas
- Measurement methods
- Short and long-term actions

You can access various resources from the main menu or from here:

A [pdf summary](#) of this case study

A [powerpoint presentation](#) of the main points made in this case study

A set of [web links](#)

