

General guide

September 2012

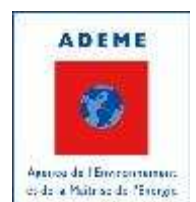
Freight transport



Voluntary commitments Charter

Reducing CO₂ emissions

Road freight transport



The charter of voluntary commitments to reduce the CO2 emissions of road freight transport companies

The French Ministry for Ecology, Sustainable Development and Energy (MEDDE) and ADEME (French Environment and Energy Management Agency), in consultation with professional road freight transport organisations, have developed the "Charter of voluntary commitments to reduce CO2 emissions". Officially launched on 16 December 2008, the scheme is distinguishable by the logo "CO2 target - Transport companies commit" (*Objectif CO2 - Les transporteurs s'engagent*). Since 5/12/2012, companies are invited to log on to the website www.objectifco2.fr, where all of the documents and the central tool for the scheme can be found.

Committing to the scheme

The CO2 Target charter is part of a global movement against climate change, with the more specific aim of reducing CO2 emissions, and is in line with the conclusions of the Grenelle de l'Environnement (French multi-party debate on the environment).

The CO2 Target scheme is directed at all **transport companies for third parties**, irrespective of their size or activity, and to **companies and shippers with their own fleets** (for own accounts exclusively, only vehicles with a GVW greater than 3.5 tonnes are concerned). Companies commit to a 3-year concrete and customised action plan to reduce their fuel consumption and consequently their CO2 emissions (mainly greenhouse gases). The scheme provides companies with a coherent, reliable and nationally recognised methodological framework, as part of French Observatory for Energy and Environment in Transport's (OEET) activities.

The charter of voluntary commitments

To sign the charter and thereby join the scheme, the company must comply with the following prerequisites:

- 1. Carry out a CO2 diagnosis** whose aim is essentially to assess the situation, choose the scope of commitment and the reference year.
- 2. Define two environmental performance indicators** specific to the company (g CO2/km and g CO2/t.km) with a 3-year reduction target for each.
- 3. Define an action plan over a 3-year period** (using the Action sheets). This should be developed based on the four key areas of the scheme (vehicle, fuel, driver and organisation of transport flows).
- 4. Choose at least one action for each key area** bearing in mind that every action chosen should correspond to a quantified and measurable target to be achieved within a predetermined time period so that the results obtained can be monitored and assessed.

Tools and methodological guides

- General guide for the CO2 Target scheme

The general guide describes in detail the 4 successive stages of the CO2 Target scheme: preparing the project (self-assessment), carrying out the CO2 diagnosis, signing the charter, then implementing it and monitoring the commitments.

- CO2 diagnosis specifications

The specification document specifies the content and methods for carrying out the CO2 diagnosis, as well as any assistance with the implementation and monitoring of the action plan.

- Action sheets

The purpose of the action sheets is to help companies decide on the various solutions likely to be implemented in order to reduce the fuel consumption and CO2 emissions of their transport activity, by providing detailed and independent information. They are classified into the four key areas of the scheme: vehicle, fuel, driver and organisation of flows.

- www.objectifco2.fr

This Website is the central tool for the scheme.

Its objectives are to:

- review the relevance of entering the scheme (self-assessment),
- assess and monitor CO2 emissions on the chosen scope;
- assess the potential CO2 and fuel savings, as well as the return on investment, according to the actions chosen;
- monitor the progress of the objectives;
- monitor the predefined environmental performance indicators over the 3 years of commitment.

Controlling fuel consumption: an economic and environmental necessity for RFT companies

1. Many parameters affect vehicle fuel consumption

In a context of steadily rising oil prices and the fight against climate change, companies in the road freight transport sector have a wide range of solutions available to help them to reduce the fuel consumption of their vehicles and their CO₂ emissions. These solutions are technological (based on the vehicle and the fuel), organisational (optimising of loads and flows) and behavioural (based on the driver). However, none of them alone are likely to offer sufficient potential. Each action must therefore be considered in a complementary way.

Beyond the actual characteristics of the engine, a vehicle's fuel consumption is the result of a wide range of factors and parameters that may in one way or another have a positive or negative effect.

Broadly speaking, the following can be distinguished:

- parameters relating to the vehicle itself:
 - engine (power and age of the engine);
 - weight of the vehicle and its trailer;
 - load transported;
 - vehicle's average speed;
 - vehicle's equipment (shape, etc.);
 - vehicle's maintenance;
 - tyres (type, pressure and condition of the tyres);
 - accessories (air-conditioning, screens, etc.);
- parameters that are external to the vehicles and related to operational usage conditions:
 - driver's driving technique;
 - climatic conditions (rain, wind, cold weather, hot weather, etc.);
 - journey profile;
 - traffic conditions.

2. Monitoring consumption: essential for better management of fuel costs and CO₂ emissions for your transport activity

A fuel consumption reduction programme adapted to the company can only be implemented if it has established effective and structured consumption monitoring and management measures that enable it to understand its initial situation and assess the development of its performances. Knowing how to measure and monitor its fuel consumption enables the company to produce an initial assessment and set a quantified and realistic reduction target as well as targeted actions. This means starting from the principle that **anything that is measured can be improved**.

Fuel savings and therefore the reduction in CO₂ emissions obviously involve knowing the best possible consumption for each vehicle and each driver. The various stages for establishing this management are broadly speaking as follows (for more details see action sheet no. 3 of the fuel key area):

- collecting data in order to define relevant monitoring indicators;
- analysing and assessing the data collected;
- managing and using the information.

3. The CO₂ Target charter of voluntary commitments

3.1 A global and structuring process for RFT companies

The French Ministry for Ecology, Sustainable Development and Energy (MEDDE) and the French Environmental and Energy Management Agency (ADEME), in consultation with professional organisations, have developed the "Charter of voluntary commitments to reduce CO₂ emissions" known as the CO₂ Target. Officially launched in December 2008, the charter is part of a global movement against climate change with the more specific aim of reducing CO₂ emissions (mainly greenhouse gases). Similarly, it also aims to contribute to helping RFT companies reduce their fuel consumption and thus reduce the fuel item amount in company accounts.

The scheme enables companies to commit to a 3-year concrete and customised action plan to reduce their fuel consumption and consequently their CO₂ emissions.

The signatory companies of the charter therefore commit to reducing their CO₂ emissions by implementing at least one action in each of the four key areas defined by the charter, i.e.:

- vehicle;
- fuel;
- driver;
- organisation of transport flows.

Through this initiative, the road freight transport sector is resolutely moving towards a sustainable development logic in order to help achieve France's greenhouse gas reduction targets.

For the signatory companies, the CO₂ Target charter for voluntary commitments represents:


- a reduction in their fuel consumption in order to improve their profitability and competitiveness;
- better management by establishing a monitoring scoreboard;
- a commitment to a structuring process, which is a source for mobilising and motivating all staff;
- a scheme that can be promoted commercially, in particular with their shipping customers who are increasingly aware of environmental issues;
- a modern environmentally-friendly company image with a sustainable development outlook;
- an improved road transport image in France.

3.2 Scope of the scheme

The CO₂ Target scheme is directed at all transport companies for **third parties, irrespective of their size or activity, and to companies and shippers with their own fleets** (for own accounts exclusively, only vehicles with a GVW greater than 3.5 tonnes are concerned)¹ .

Four vehicle segments associating size with main usage and GVW² were established.



Vehicle size	Main use considered	Max Gross Weight	Pictograms
LCV Light Commercial Vehicle	Urban	≤3.5 tonnes	
Rigid Small Truck	Urban	3.6 - 12 tonnes	
Rigid Large Truck	Regional	> 12 tonnes	
Semitrailer	Long Distance	40 tonnes	

3.3 Company expectations

Companies have expressed the desire to:

- have independent information on;
 - the various measures and actions available on the market to reduce fuel consumption;
 - the potential savings (fuel and CO₂) and return on investment related to each possible action;
- have measurement and assessment tools;
- be able to promote their environmental actions.

The CO₂ Target scheme meets these expectations and enables companies to:

- Internally:
 - communicate on the measures taken and on the efforts carried out;
 - measure and monitor the actions implemented.
- Externally:
 - communicate with customers (respond to shipper customer requests on CO₂ emissions, integration in sales proposals, etc.);
 - communicate with the general public.

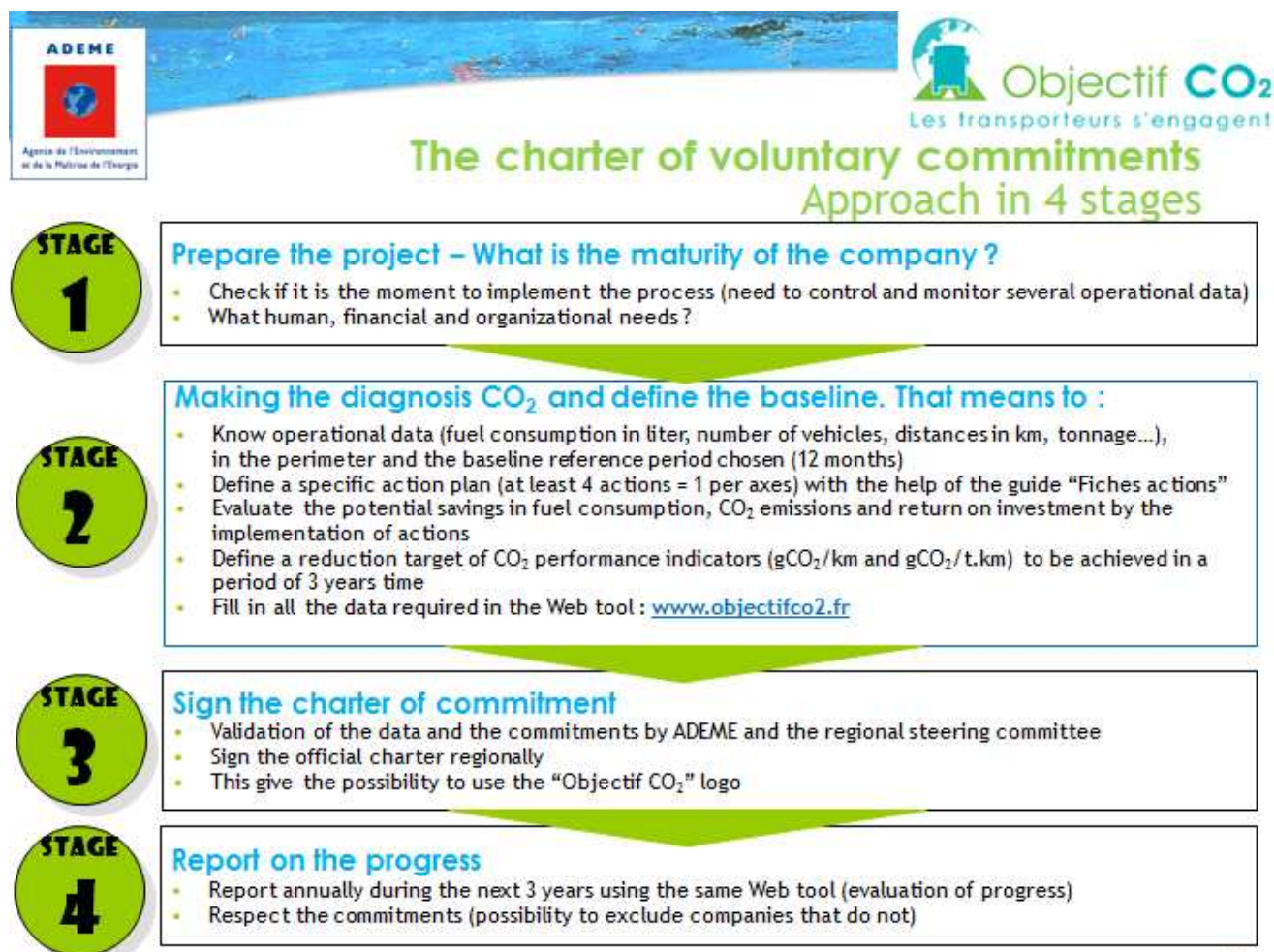
The scheme along with the tools and methods presented in the following chapters were developed with this in mind.

¹ For more details on the scope of the process see the introductory chapter of the "Action sheets" document

² GVW = Gross Vehicle Weight

3.4 General outline of the scheme: the 4 stages

The CO₂ Target scheme focuses on the following 4 successive stages:



These various stages and their implementation are presented in the following chapters.

4. Stage 1: Preparing the project

4.1 Conditions for success

Depending on the company's situation, the reasons for entering the CO₂ Target scheme are economic, environmental and/or social. They include:

- maintaining an environmental image;
- reducing costs (managing fuel costs);
- bringing employees together on a corporate project;
- responding to customer requests (but also gaining knowledge in order to offer the customer new solutions); etc.

Motivation must guide the charter of voluntary commitments towards a specific reflection corresponding to the company's expectations. Motivation must be shared by the employees and above all be supported by management which will have to make decisions in order to define and achieve the objectives.

In order to succeed in establishing the scheme, two aspects must be taken into account:

- **A managerial aspect:** The scheme must be considered as a true corporate project supported by management. It is also a true "management" tool, which is a source for motivating the company's employees. This analysis is fully shared by the companies already committed to the scheme.
- **A technical aspect:** In order to add credibility to the scheme, choose and monitor the most relevant actions and achieve significant results, an organised, reliable and robust information feedback system must be implemented. The scheme is based on the measuring and monitoring certain data, such as fuel consumption and activity data.

Significant managerial involvement, characterised by clear willingness and provision of human and financial resources (time, internal and external resources, etc.), is essential for the project to succeed.

An in-house project manager should be appointed. He will coordinate with other departments in the company, with the steering committee and with external partners.

To complete the scheme successfully, it is also recommended to create two bodies within the company; a steering committee and a project group:

- the steering committee discusses the information collected and makes decisions, in particular those concerning the measures established following the diagnostic process.
- the project group coordinates the scheme and is responsible for the practical aspects of each stage. Support from an external service provider may be considered if the company does not have much time, does not feel that it is competent or wants an independent external participant.

For SMEs, a single committee will fulfil both functions.

The company must devote the necessary human resources to lead and implement internally the action plan to be defined.

4.2 "Self-assessment" or reviewing the prerequisites

To prepare the project properly, it is important to ask the right questions in order to judge the relevance of your application.

The purpose of self-assessment is to provide the company with elements that allow it to:

- analyse the relevance of getting involved in the CO₂ Target charter scheme;
- decide whether it has the capacity and maturity to be part of the scheme (prerequisites).

Self-assessment is carried out by the company using the online Web tool on the website www.objectifco2.fr.

This self-assessment is designed so that the applicant who wishes to enter the charter of voluntary commitment scheme can review whether it meets at least some of the prerequisites. Indeed, for a company to join the scheme, it needs to manage and monitor certain data. These prerequisites are used to review the company's maturity in relation to the problems of controlling fuel consumption and greenhouse gas emissions. At the same time, they are used to confirm that the company has all of the tools available for managing its impacts (monitoring consumption, knowledge of its fleet, etc.).

There are 9 prerequisites for the charter of voluntary commitments:

Prerequisite no. 1	The project is supported by the company's general management
Prerequisite no. 2	An in-house project manager has been appointed
Prerequisite no. 3	The company has identified its motivations for committing to the scheme (environmental, economic, social and customer)
Prerequisite no. 4	The company knows and actively manages the structure of its fleet of vehicles
Prerequisite no. 5	The company knows and monitors the fuel consumption for each vehicle and/or each driver
Prerequisite no. 6	The company manages the training and awareness raising actions for its drivers
Prerequisite no. 7	The company knows and monitors its flows of goods
Prerequisite no. 8	The company knows its road transport subcontracting (if used in the course of its activity and if included within the scope defined by the company)
Prerequisite no. 9	The company knows the fuel consumption or tonnes.kilometres related to non-road modes if used in the course of its activity and if included within the scope defined by the company

If the company does not meet the prerequisites, recommendations are proposed so that the company can take suitable measures. Nonetheless, the company may start to carry out its diagnosis bearing in mind that it has to change this situation before being able to have its commitment approved and joining the scheme. Indeed, if the company does not meet all of the prerequisites (see chapter 5.1), its acceptance into the charter of voluntary commitment scheme may not be approved.

4.3 External support for the company

4.3.1 ADEME's regional directorates

ADEME's regional directorates may assist companies in their efforts, via:

- technical or methodological guidelines;
- the distribution of information on experiments conducted in other regional, French or foreign companies;
- financial aid for the diagnosis or implementation of certain measures.

Depending on the regions, ADEME and its partners may also use special advisors to assist the companies in their efforts (information role, advice, etc.).

4.3.2 Regional directorates for the environment, development and housing (DREAL)

The DREAL located in regions act as operational branches for the MEDDTL (French Ministry for Ecology, Sustainable Development, Transport and Housing) for all of its tasks. They conduct the key urban, road, rail, maritime or river development projects in partnership with local and regional authorities and make sure that the regulations are implemented, in particular those relating to the safety and sustainable development of equipment and construction.

Within the voluntary commitment scheme, the DREAL are co-partners with ADEME and, therefore, have a support role for companies, providing information on the scheme, the tools and methodologies proposed.

4.3.3 Regional councils

The region plays an important role in terms of economic, social and cultural development.

Within the framework of the voluntary commitment scheme, the Regional councils may form partnerships, in particular as financial partners of ADEME's regional directorates.

4.3.4 Specialist consultancy firms





In order to carry out its CO₂ diagnosis, the company may call on the skills of an external service provider who will assist it in its efforts. This service provider will be asked to:

- produce and process all of the information required for the decision-making (internal data processing, collection, input and statistical processing of data, analysis and summarising of results, coordinating meetings within the company, etc.);
- carry out the diagnosis (Stage 2) and assist the company with the implementation of its actions (Stage 4);
- assist the in-house communication department in order to inform the employees on the project's progress and report study results to them;
- assist steering committee and project group discussions and debates by providing expertise and an outside perspective;
- budget the various measures and formulate precise recommendations.

5. Stage 2: Carrying out the CO₂ diagnosis

5.1 Prerequisites of the charter

To sign the charter of voluntary commitments and thereby join the scheme, the applicant must fill in the online Web tool on the website www.objectifco2.fr, while complying with the following prerequisites:

	<p>Carry out a CO₂ diagnosis using the online Web tool on the website www.objectifco2.fr. Its aim is essentially to assess the situation and choose the scope of commitment. This requires companies to have a good understanding and monitoring of: their fleet, the fuel consumption for each vehicle and/or driver, their driver training and awareness raising actions, as well as their transport flows.</p>
	<p>Choose/Define two environmental performance indicators specific to the company (g CO₂/km and an activity unit for obtaining the g CO₂/t.km indicator) with a 3-year reduction target.</p>
	<p>Define an action plan over a 3-year period based on the following four key areas:</p> <ul style="list-style-type: none">• Vehicle• Fuel• Driver• Organisation of transport flows.
	<p>Choose at least one action for each key area bearing in mind that every action chosen should correspond to a quantified and measurable target to be achieved within a predetermined time period so that the results obtained can be monitored and assessed.</p>

When reviewing the signing of the charter, other **more qualitative elements** may be taken into account, such as:

- human resources that the company considers deploying in order to lead and implement the action plan internally;
- the method chosen for measuring and monitoring the fuel consumption; etc.

The online Web tool on the website www.objectifco2.fr (see chapter 0 for more details), is a central tool for the scheme, which helps the company assess its situation and define whether it has the necessary information on its fleet, consumption, and training, etc.

Furthermore, the tool is used to assess the CO₂ savings and time to return on investment that the signatory may obtain depending on the actions it chooses and the targets it sets for each. Thus the tool enables the company to test various situations and assess which targets it can realistically commit to.

5.2 Environmental performance indicators

The problem of the definition of environmental performance indicators still remains. These indicators are used to quantify and monitor, over the three-year commitment period, the company's performances in terms of CO₂ emissions. They are used to compare activity changes with emission changes.

An environmental performance indicator is the ratio between the company's CO₂ emissions and data that is representative of its activity. This environmental performance indicator helps to overcome the change in activity and thus assess the company's change in performance for the scope selected.

It must reflect the efficiency of the unit production (i.e. the driver/vehicle combination performance) and the efficiency of the company's organisation (consolidation quality, trip management, etc.).

Indeed, the company's energy performance is the product of the consumption per kilometre travelled and the ratio between the total number of kilometres travelled and the number of kilometres that are strictly necessary for the operation sold. Between these two figures, there is, for example, the level of no-load kilometres (necessary between two tasks but with no commercial value) or the level of vehicle filling in the case of consolidations.

The g CO₂/km indicator then another activity data must be monitored which will enable it to monitor the g CO₂/t.km indicator. This activity data must be:

- representative;
- understandable;
- easy to use;
- managed and monitored internally

The activity data may be defined, based on the company's activities, by the tonnages transported, the number of packages delivered, and the number of pallets transported, etc.

A conversion factor for the unit selected in tonnes and t.km must be entered in the web tool.

For complete and batch activities, choosing tonnes.kilometres provides a more faithful representation of the activity. In general, this data will be reconstituted from the shippers' declarations for the tonnages and calculations using computer distance measuring systems for the distances.

Finally, for consolidation or parcel delivery activities, the number of packages constitutes data often used for measuring the activity.

In more complex cases, the activity will usually have to be broken down into several segments monitored by different indicators. For example, in the case of single-package delivery services, the activity of large vehicles carrying out exchanges between sites following a usually fixed transport plan could be monitored by the total number of kilometres travelled and the activity of

small vehicles carrying out collection and delivery from sites could be monitored by the number of positions handled.

If insufficient physical data is available, company turnover may constitute a measure of activity. Attention will simply need to be paid, especially at the time of price changes, not to mistake a price change for an increase in the volume of activity.

Finally, the company may choose any other activity data that it usually uses, where its relevance and production is well managed.

However, the notion of weight of the goods/packages transported must be included in the activity data in order to take into account its impact on fuel consumption and therefore CO₂ emissions. It is therefore essential to improve information feedback in order to ensure the accuracy of the environmental performance indicator defined by the company.

The monitoring indicators will provide essential information for measuring the company's overall efficiency and making comparisons:

- between vehicles;
- between drivers;
- between activities;
- between agencies;
- between vehicle types, etc.

5.3 "CO₂ diagnosis" targets

Preparing the project has made it possible to get organised internally and check that the company is ready to invest in the scheme. It can now start to carry out the "CO₂ diagnosis" on the defined scope.

The CO₂ diagnosis targets are as follows:

- carry out an initial assessment of the company (management of the fuel consumption, vehicle fleet, driver training, organisation of flows, subcontracting, etc.);
- collect the necessary data for the calculations;
- assess the company's CO₂ emissions on the chosen scope;
- assess the potential fuel and CO₂ savings expected through the various actions proposed in the charter;
- assess the time to return on investment for the various actions;
- set objectives for each action chosen;
- define in a customised way and on a given scope:
 - a 3-year action plan
 - the two environmental performance indicators
- quantify the reduction target to which the company commits;
- approve the charter's prerequisites.

5.4 Tools and methods

Carrying out the CO₂ diagnosis is based on tools and methods specifically developed for the CO₂ Target scheme, i.e.:

- this general guide on the scheme;

- the specification document relating to the CO₂ diagnosis and monitoring of the scheme;
- the online Web tool on the website www.objectifco2.fr and its user manual;
- the detailed "action sheets" classified according to the four key areas of the scheme (vehicle, fuel, driver, organisation of transport flows).

These tools and guides are available on the website www.objectifco2.fr.

5.4.1 "CO₂ diagnosis" specifications

The purpose of the "CO₂ diagnosis" specification document is to enable the company or nominated service provider (if the company decides to call on external assistance) to carry out a diagnosis and provide comprehensive and compliant support.

The document specifies the various stages to be followed in order to carry out this diagnosis with the aim of:

- assessing the company's management of fuel consumption data;
- assessing the potential reduction in fuel consumption and CO₂ emissions expected through the various actions proposed in the charter;
- approving the internal management of data required for the company to enter the scheme;
- developing the company's 3-year action plan;
- quantifying the reduction target to which the company commits;
- assisting implementation of the action plan and monitoring the progress of the scheme.

The specifications are a true guide for the company:

- for carrying out the diagnosis if it decides to carry it out internally;
- for choosing the external service provider if it decides to be assisted in the scheme (because the service provider must monitor the requirements described in the specifications).

The document contains the following chapters:

- requirements for the service provider (if the company uses one);
- diagnosis execution aspects;
- support aspects;
- task management;
- sending of information;
- summary sheet.

5.4.2 Online Web tool on the website www.objectifco2.fr

The online Web tool on the website www.objectifco2.fr is the central tool for the scheme.

The objectives of this tool are to:

- review for the company the relevance of being a part of the scheme,
- assess and monitor the company's CO₂ emissions on the chosen scope;

- assess the potential CO₂ savings and the return on investment according to the actions chosen;
- monitor the progress of the objectives;
- monitor over time the environmental performance indicators defined.

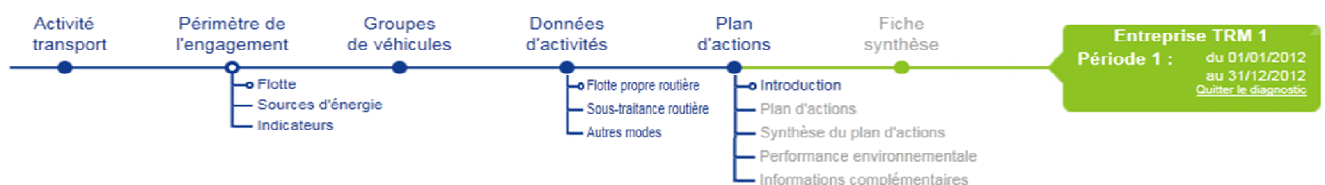
It is used during the four stages of the scheme:

- Stage 1 Company self-assessment
- Stage 2 CO₂ diagnosis
- Stage 3 Approval of the company's commitment by the regional committee, then signing of the Charter
- Stage 4 Annual update of the company's commitment over the 3-year period

The online Web tool on the website www.objectifco2.fr is structured in a logical way:

1. Company identification and self-assessment (prerequisites)

2. Entering the commitment and the annual update takes place in several phases organised around a navigation plan which enables the company to know where it is at any time.



The tool requires management and monitoring of the data required for the various calculations. The basic data to be input includes, among other things:

- the fleet's total fuel consumption;
- the fleet's structure;
- the number of drivers;
- the distances travelled by the vehicles...

Depending on the company's situation and the actions selected, other information may be requested:

- the number of refrigeration units;
- the number of eco-driving-trained drivers;
- the proportion of subcontracted activity...

The "CO₂ Target" web tool enables the company to define its action plan and its global CO₂ emission reduction target. It thus enables the company to calculate the potential fuel and CO₂ emission savings and simulate the time to return on investment according to the action chosen and its level of commitment. This tool was developed for companies in view of:

- testing various emission reduction actions proposed (see catalogue of actions in chapter 5.4.3);
- assessing the CO₂ and fuel savings that can be made by choosing and implementing these actions.

This tool should be used throughout the company's period of commitment to the scheme. In this way, monitoring is made possible using the defined environmental performance indicators and the various actions selected by the company.

For further information and better understanding of the tool, consulting the user manual is highly recommended.

5.4.3 Action Sheets

Various actions that help to reduce fuel consumption and CO₂ emissions have been identified according to the four key areas of the charter of voluntary commitments, i.e. vehicle, fuel, driver and organisation of transport flows.

Constituting decision-making help tools, the action sheets are designed to provide objective and independent information to companies on solutions that have a positive impact in terms of fuel consumption and CO₂ emissions and that are available on the market.

In addition to the Web tool and downloadable from the website www.objectifco2.fr, they describe the various technologies, organisations or techniques that have a positive impact on fuel consumption, the conditions for their implementation, an order of magnitude of the return on investment and an estimation of the costs. At the same time, they assess the fuel and CO₂ emission savings that the company can expect.

The action sheets include a description and presentation of the actions that can be taken to reduce CO₂ emissions. They are organised according to the following sequence:


- summary sheet;
- context and regulations;





They are then defined as solutions based on the following sections:

- "How does it work?";
- impact on consumption and CO₂ emissions;
- relevant area;
- implementation (including the costs and feasibility of the solutions identified);
- monitoring of the solution (data collection methods and indicators).

The scope of the action sheets, as well as that of the CO₂ Target charter, **concerns all transport companies for third parties, irrespective of their size or activity, and companies and shippers with their own fleets** (for own accounts exclusively, only vehicles with a GVW greater than 3.5 tonnes are concerned)³.

Four vehicle segments associating size with main usage and GVW⁴ were established.



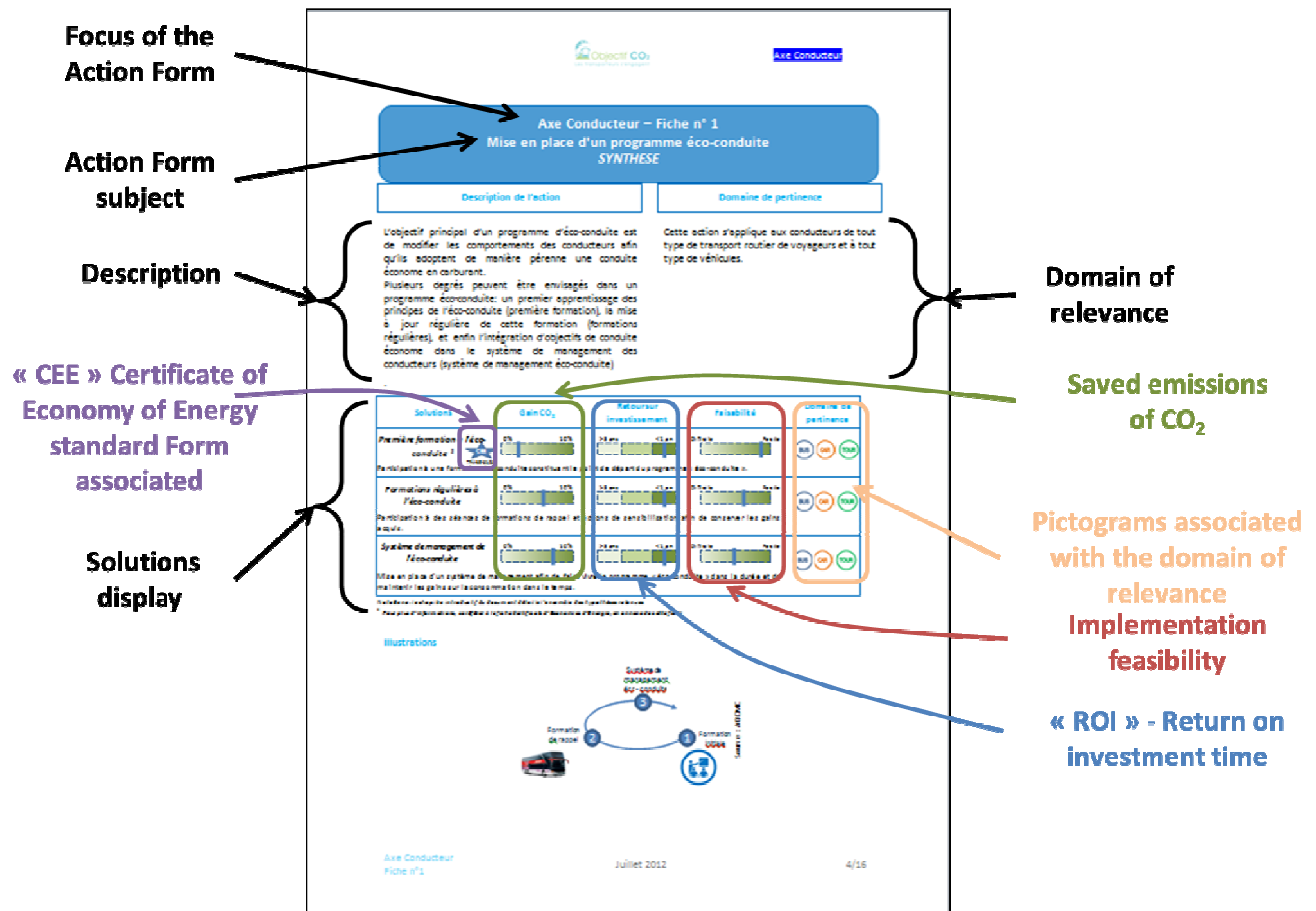
Vehicle size	Main use considered	Max Gross Weight	Pictograms
LCV Light Commercial Vehicle	Urban	≤3.5 tonnes	
Rigid Small Truck	Urban	3.6 - 12 tonnes	
Rigid Large Truck	Regional	> 12 tonnes	
Semitrailer	Long Distance	40 tonnes	

The action sheets are organised around 4 key areas:

- **Vehicle key area:** this groups all of the actions concerning vehicles and trailers (accessories, engines, tyres, etc.);
- **Fuel key area:** this includes the actions concerning vehicle propulsion energy (monitoring of consumption, biofuel, hybrid, electric, etc.);
- **Driver key area:** this key area groups the actions concerning driver behaviour (eco-driving, good practices in temperature-controlled transport, etc.);
- **Organisation of transport flows key area:** this concerns the actions relating to trip and load optimisation, use of non-road modes, and raising awareness of road customers and subcontractors.

³ For more details on the scope of the scheme see the introductory chapter of the "Action sheets" document

⁴ GVW = Gross Vehicle Weight



Presentation of a summary sheet summarising the proposed solutions

The summary table on the following three pages shows all of the actions and solutions identified, focusing on:

- the relevant area of each solution in terms of vehicle categories concerned;
- the possible actions when renewing vehicles;
- the existence or not of a standard ESC (Energy Saving Certificate);
- the CO₂ savings, the time to return on investment and the level of feasibility of the solution considered. The data ranges correspond to the dispersions observed between the various vehicle categories.

Key

Temperature-controlled transport specific sheets	
Action to take when renewing vehicles	
ESC sheet associated with the solution	
Relevant area	

















































Time to return on investment	Long (>3 years)	> 3 yrs
	Intermediate	1-3 yrs
	Short (<1 year)	< 1 yr
	Not applicable	-

CO2 savings	< 2.5%
	2.5 - 5%
	≥ 5%

Feasibility	Difficult	+++
	Intermediate	++
	Easy	+

Action sheets	Solutions	Relevant area	Vehicle or trailer renewal	ESC sheet	CO ₂ savings	Time to return on investment	Feasibility
Vehicle Key Area							
Vehicle AS 1: Modernisation and adjustment of the fleet to its use	Power optimisation				3 - 5%	< 1 yr	+
	Automatic gear box option			★	3 - 7%	1-3 yrs	+
	Drive axle optimisation				2.5%	< 1 yr	+
Vehicle AS 2: Technical solutions for speed restrictions and automatic cutoff of the engine when idling	Maximum speed restriction for vehicles				1.2 - 5%	< 1 yr	+
	Automatic cutoff of the engine when idling				1 - 6%	< 1 yr	+
Vehicle AS 3: Use of energy-saving lubricants	Use of energy-saving engine lubricants			★	1.25%	< 1 yr	+
Vehicle AS 4: Use of accessories to reduce aerodynamic drag	Tractor and cab accessories			★	0.5 - 10%	1-3 yrs	+
	Trailer or body accessories				0.5 - 4%	1-3 yrs	++
Vehicle AS 5: Improvement of vehicle maintenance (excluding tyres)	Installation of a maintenance monitoring tool				2%	< 1 yr	+
	Creation of a log book for drivers				Indirect	-	++
Vehicle AS 6: Tyre fleet management	Low resistance tyres			★	0.8 - 4%	< 1 yr	+
	Tyre regrooving and retreading			★	1%	< 1 yr	+
	Tyre inflation			★	1 - 2.5%	< 1 yr	+
	Geometry optimisation				1.5%	< 1 yr	+
Vehicle AS 7: Air-conditioning	Evaporative air-conditioning				3%	1-3 yrs	+++
Vehicle AS 8: Vehicle weight reduction	Vehicle weight reduction				0.5 - 20%	-	++
Vehicle AS 9: Reduction of consumption related to needs other than traction	Optimisation of power supply to auxiliary equipment				Variable	-	+++
Vehicle AS 10: Temperature-controlled: selection of the refrigeration system	Definition of the use of machinery for correct dimensioning of the refrigeration unit				Variable	-	+
	Transport refrigeration units with a feeder option				5 - 10%*	-	+
	High Energy-Efficiency Refrigeration Unit			★	50%*	> 3 yrs	+
	Use of machines equipped with an indirect injection liquid nitrogen or CO ₂ cryogenic refrigeration unit				75%*	> 3 yrs	+++
	Use of machines equipped with a direct injection liquid nitrogen cryogenic refrigeration unit				65%*	> 3 yrs	+++
	Refrigerating machines equipped with eutectic plates or a so-called accumulation unit				97%*	< 1 yr	++
Vehicle AS 11: Temperature-controlled: selection of isothermic body	Specific equipment and maintenance for reducing cold losses				15 - 25%	< 1 yr	+
	Maintenance of refrigeration equipment				5%	-	+

* as a % of the chiller's consumption

Action sheets	Solutions	Relevant area	Vehicle or trailer renewal	ESC sheet	CO ₂ savings	Time to return on investment	Feasibility
Fuel Key Area							
Fuel AS 1: Selection of propulsion mode	Stop & Start	 			1 - 5%	< 1 yr	++
	Hybrid vehicles	 			10 - 15%	> 3 yrs	++
	Electric vehicles	 			94%	> 3 yrs	+++
Fuel AS 2: Use of alternative fuels	Use of B30	   			< 13.6%	> 3 yrs	++
Fuel AS 3: Maintenance of the cleanliness of diesel engine injection and supply circuits	Maintenance of the cleanliness of diesel engine injection and supply circuits	   			4.4%	< 1 yr	+
Fuel AS 4: Improvement of consumption monitoring	Collection of information	   			Indirect	-	++
	On-board telematics (consumption)	   			5%	< 1 yr	++
	Management and use of the information	   			Indirect	-	++
Driver Key Area							
Driver AS 1: Implementation of an eco-driving programme	Initial eco-driving training	   			3%	< 1 yr	+
	Regular eco-driving training	   			6%	< 1 yr	+
	Eco-driving performance management system	   			10%	< 1 yr	++
Driver AS 2: Economic gestures and good practices specific to temperature-controlled transport	Limitation of cold losses when opening the unit	    			Variable	-	+

Action sheets	Solutions	Relevant area	Vehicle or trailer renewal	ESC sheet	CO ₂ savings	Time to return on investment	Feasibility
Organisation of transport flows key area							
Org. AS 1: Use of non-road modes	Use of combined sea-road transport				16%	-	++
	Use of combined River-Road transport			★	48%	-	++
	Use of combined Rail-Road transport			★	94%	-	++
Org. AS 2: Trip optimisation computer tools	Transport plan creation tools				5 - 15%	1-3 yrs	++
	Vehicle geolocation tools				1 - 10%	1-3 yrs	++
Org. AS 3: Vehicle load optimisation	Optimise the load volume/weight ratio				3 - 20%	< 1 yr	++
	Share the transport between several customers				7 - 10%	< 1 yr	++
	Use of a double floor				14 - 21%	1-3 yrs	++
	Use of load coefficient improvement software				7 - 14%	< 1 yr	+
	Trailer with road swap body				Variable	1-3 yrs	+
	Contraflow				Variable	-	++
	Replacement of a standard refrigeration vehicle with a multi-temperature vehicle					20 - 30%	1-3 yrs
Org. AS 4: Collaborative work with customers for improved optimisation	Information on CO ₂ emissions for transport services				Indirect	-	++
	Share a common transport plan with the customer				Variable	-	+++
	Modification of the palletisation system				3 - 7%	-	++
	Establishment of an appointment system				Variable	-	+
Org. AS 5: Raising awareness with road subcontractors	Inform subcontractors of good practices to be adopted				1 - 2%	-	+
	Suggest the use of performance monitoring indicators				Indirect	-	++
	Suggest membership to the CO ₂ Target Charter				5%	-	+
Org. AS 6: Optimisation of freight transport in towns	Optimised logistics plans for urban delivery				Variable	-	+++

5.5 Who can carry out the CO₂ diagnosis?

The CO₂ diagnosis is carried out based on the specifications:

- by the company itself internally, only using the company's knowledge and teams, if it has the necessary skills and resources,
- or
- using an external service provider, whose services must then meet the requirements of the specifications described in chapter 0.

5.6 How to get help?

If the company decides to use an external service provider to assist it with carrying out its diagnosis, financial aid may be granted by ADEME, within the framework of its scheme in force, its available budget and its possibly associated regional financial partners.

The company must then demand that the service provider complies with the specifications within the framework of the charter of voluntary commitments.

If the company decides to carry out the CO₂ diagnosis using its own resources, it shall have the above-described guides, tools and methodologies. With regard to technical information points, it may also obtain advice from the regional and/or national partners of the voluntary commitment scheme, and from any special advisors available in the region.

6. Stage 3: Approval of the CO₂ diagnosis and signing of the charter

The purpose of this third phase is to review the diagnosis carried out by the company and formalise the signing of the charter by the company.

6.1 Approval of the company joining the scheme

The CO₂ diagnosis was used to enter data into the online web tool at www.objectifco2.fr. Using this same tool, a company commitment approval request is sent to ADEME's DR (regional directorate) (with a copy sent to the DREAL).

After opinion and validation by the regional committee for the Charter, the company may join the voluntary commitment scheme.

The company selection criteria are the following:

- compliance with four prerequisites



Carry out a CO₂ diagnosis using the online Web tool on the website www.objectifco2.fr. Its aim is essentially to assess the situation and choose the scope of commitment. This requires companies to have a good understanding and monitoring of: their fleet, the fuel consumption for each vehicle and/or driver, their driver training and awareness raising actions, as well as their transport flows.



Choose/Define two environmental performance indicators specific to the company (g CO₂/km and an activity unit for obtaining the g CO₂/t.km indicator) with a 3-year reduction target.



Define an action plan over a 3-year period developed based on the following four key areas:

- Vehicle
- Fuel
- Driver
- Organisation of transport flows.



Choose at least one action for each key area bearing in mind that every action chosen should correspond to a quantified and measurable target to be achieved within a predetermined time period so that the results obtained can be monitored and assessed.

- taking into account other more qualitative elements such as:
 - human resources that the company considers deploying in order to lead and implement the action plan internally;
 - the method for measuring and monitoring the fuel consumption retained; etc.

6.2 Signing of the CO₂ Target charter

After approval by the regional committee, the company may officially sign the CO₂ Target charter of voluntary commitments, which must include the summary sheet from the Web tool as an appendix.

This signature is tripartite or quadripartite agreement between the company, the MEDDE (represented regionally by the Prefect), and ADEME, and in some cases, the regional council.

In each region, the DREAL and ADEME organise a meeting at least once a year with their partners (regional council, professional organisations, and signatory companies) in order to assess the scheme.

Two levels have been defined to differentiate the signatory companies of the charter:

- **Level 1:** Use of the logo and name associated with the scheme

Upon signing the charter, the company may use the logo and name associated with the scheme in order to provide information on its commitments, both internally and externally. The list of signatory companies of the charter is posted online on the website www.objectifco2.fr.

However, after opinion by the regional committee, partners of the scheme, reserve the right to exclude companies that do not keep their commitments.

- **Level 2:** Environmental labelling of transport companies

In a later phase, a label system will be established in order to reward companies that have achieved an above average level of environmental performance. This label, awarded according to clearly defined criteria, will be graded according to the level of performance.

7. Stage 4: Implementing and monitoring commitments

The details concerning implementation methods are specific to each action chosen by the company. However, some stages are shared:

- identifying and appointing a manager in charge of establishing and monitoring actions: this person may be a company employee to which a minimum time will be allocated for this function or a person recruited for the occasion;
- defining objectives and internal and external communication resources. It is recommended to formalise the implementation of the first measures by organising a launch day.

7.1 Support through in-house communication/awareness raising actions

Throughout the project, it is essential to regularly communicate with employees on the progress and challenges of the charter of voluntary commitments. This mainly concerns modifying behaviours. This is why communication must raise awareness and thereby promote the involvement of all, by convincing employees that they have an active role to play.

Direct communication actions with employees should be prioritised so that a dialogue can be started and each employee can understand how they can effectively contribute to a successful outcome. Inter-agency challenges may be considered on subjects such as fuel consumption or other actions of the CO₂ Target charter.

Success generates success, and if employees see that something works well, they will take part. It is therefore important to provide information on the results of actions and promote them.

7.2 Sustainability of the scheme

When actions are implemented, it is essential to make sure that they are monitored: this work will make it possible to check whether the initial objectives set have been achieved, undertake any corrective measures and identify new ideas for maintaining the scheme.

7.3 Maintaining momentum

A few months after the company has committed to the charter of voluntary commitments, the initial enthusiasm may have waned. It is important that employees keep in mind that the concept is alive. Therefore, it is important to:

- regularly review the initiatives;
- rapidly and appropriately respond to any problem arising;
- keep information available and up-to-date;
- encourage positive as well as negative comments (ideas box).
Issues raised more quickly are resolved better and employees will not hesitate to discuss them, voice their opinions and come up with imaginative solutions if they feel that they are being listened to.
- Monitoring the action plan

The progress of the action plan should be monitored regularly. This monitoring, still using the web tool, will help:

- the company to achieve the targets set;
- ADEME to make sure that the company keeps the commitments made.

The implementation and achievement of targets for each action selected should be regularly assessed. Monitoring indicators, integrated into the monitoring tool, are used to assess the progress of the actions.

As with the diagnosis phase, the company can be assisted by an external service provider during this monitoring phase. This service provider should scrupulously follow the specifications defined in chapter 0.

It is suggested that the indicators and action plan should be monitored internally every 6 months at least.

7.4 Annual assessment of the company's situation and the 3-yearly assessment

Every year, after each commitment period of the charter (at most 3 months after the end of the last period), the signatory company must update its commitment in the web tool and have it approved.

This monitoring phase may constitute an opportunity, if necessary, to readjust the action plan and, after opinion by the regional committee, also excluding from the scheme any company that does not keep its commitments.

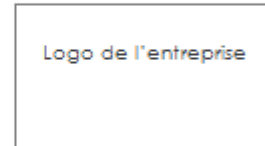
At the end of the 3-year commitment period and once the last period of commitment has been completed in the web tool, an assessment will be made (analysis of the savings made, difficulties encountered and areas for improvement, etc.)

A charter may once again be signed if the company so wishes. It will include a new 3-year period of commitment with a new action plan and new targets taking into account the last period considered and the results of the first action plan.

APPENDIX 1: CO₂ Target charter of voluntary commitments

Example of the tripartite signature charter

CHARTRE D'ENGAGEMENTS VOLONTAIRES DE REDUCTION DES EMISSIONS DE CO₂ DU TRANSPORT ROUTIER DE MARCHANDISES



L'entreprise _____ s'engage dans une démarche volontaire de réduction des émissions de CO₂ de ses activités de transport routier de marchandises, concrétisée par la présente charte.

L'entreprise a au préalable réalisé un diagnostic CO₂ qui lui a permis :

- d'établir un état des lieux initial de référence et de retenir un périmètre d'engagement ;
- de définir des indicateurs de performance environnementale et de chiffrer un objectif de réduction à atteindre sous trois ans pour chacun d'entre eux ;
- de définir un plan d'actions en retenant au moins une action par axe (le véhicule, le carburant, le conducteur et l'organisation des flux) afin d'atteindre l'objectif ainsi fixé.

Ces éléments sont repris dans la fiche de synthèse relative à l'état des lieux initial, annexée à la présente charte, issue de l'outil web mis en ligne sur le site internet www.objectifco2.fr.

L'entreprise s'engage à :

- mettre en œuvre ce plan d'actions et à en assurer le suivi ;
- mettre à jour tous les ans l'outil web à l'issue de chaque période du plan d'actions et durant les trois années d'engagements, selon l'échéancier suivant :
 - Période 1 : mois/année
 - Période 2 : mois/année
 - Période 3 : mois/année

Le Ministère de l'Écologie, du Développement Durable et de l'Énergie (MEDDE) et l'Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME) s'engagent à :

- fournir à l'entreprise le logo "Objectif CO₂" associé à la charte afin qu'elle puisse valoriser sa démarche ;
- faire figurer le nom de l'entreprise sur la liste des entreprises signataires de la charte ;
- fournir une assistance dans le cadre du suivi et de l'évaluation des actions menées par l'entreprise ;
- valoriser l'engagement du transport routier de marchandises en faveur du développement durable.

L'entreprise peut utiliser le logo "Objectif CO₂" associé à la démarche pendant toute la durée du plan d'actions et peut librement faire référence à son engagement d'entreprise signataire.

L'attention de l'entreprise est toutefois attirée sur le fait que le droit d'utiliser le logo est soumis au respect des engagements pris par elle. A défaut, le MEDDE et l'ADEME se réservent le droit d'exclure l'entreprise de la démarche. Dans ce cas, l'entreprise ne pourra plus utiliser le logo qui y est associé et sera exclue de la liste des entreprises signataires de la charte.

A _____, le _____

Pour le Ministère de l'Écologie, du
Développement Durable
et de l'Énergie

Pour l'Agence de l'Environnement
et de la Maîtrise de l'Énergie

Pour l'entreprise

M((me)) Prénom NOM

M((me)) Prénom NOM

M((me)) Prénom NOM