



EUROPEAN COMMISSION
DIRECTORATE-GENERAL ENERGY AND TRANSPORT
New Energies & Demand Management
Promotion of Renewable Energy Sources & Demand Management

Brussels, 1 January 2003

**THE EUROPEAN
MOTOR CHALLENGE PROGRAMME
PARTNER GUIDELINES**



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Introduction

The goal of substantially improving end-use energy efficiency is a key component of the EU energy and environmental policies, shared by all EU Member States. The European Commission Directorate General Energy and Transport contributes to this goal through a series of actions under the SAVE Programme and its proposed continuation in the framework of "[Intelligent Energy for Europe](#)".

The **Motor Challenge Programme** (launched in 2003) is one of these actions, aimed specifically at industrial use of electricity in Motor Driven Systems. The present Guidelines define the basic framework and the rules of the Programme. These Guidelines are linked with the separate Module documents for Compressed Air Systems, Pump Systems, Fan System, Drives (electric motors and speed controllers), and a transversal module covering Management Policies for all the above components of motor systems.

The Motor Challenge Programme is designed to be:

- flexible and open, so as to be applicable to the great variety of user situations;
- sufficiently precise to ensure that companies that carry out the commitment will achieve a significant part of potential energy savings;
- adaptable to the large variety of national programmes and agencies.

The Motor Challenge Programme is based on voluntary commitments, defined by each participating enterprise and organisation, on the basis of recommendations put forward in "Motor Challenge Module Documents" treating different aspects of Motor Driven System energy efficiency.

1.The Motor Challenge Programme Objectives and Scope

The Motor Challenge Programme is a European Commission voluntary programme through which industrial companies are aided in improving the energy efficiency of their Motor Driven Systems. Any enterprise or organisation planning to contribute to the Motor Challenge Programme objectives can participate.

Companies that use Motor Driven Systems can request "**Partner**" status. Through the Motor Challenge, they will receive:

- aid in defining and carrying out an Action Plan, to reduce energy related operating expenses, while maintaining or improving reliability and quality of service;
- public recognition for their contribution to achieving the objectives of the European Union's energy policy¹.

This document describes the benefits accruing to Partners, as well as their responsibilities. Note that organisations that wish to assist MCP Partners in achieving the goals of the Motor Challenge may become Motor Challenge "**Endorsers**"².

2.Responsibilities of participants in the Motor Challenge

In order to maintain the credibility of the Partnership, some eligibility criteria have been developed. Though not entailing legally binding obligations, Partner status requires strong commitment and a substantial contribution to the objectives of the Motor Challenge Programme. Partners can withdraw from programme at any time without penalty.

An enterprise wishing to join the Motor Challenge programme will proceed by the following 5 step process.

- 1) Inventory and evaluation of the enterprise's Motor Driven Systems.
- 2) Formulation of an Action Plan, defining the scope and nature of the enterprise's commitment.
- 3) Approval of the Action Plan by the Commission. Commission grants Partner status to Enterprise.
- 4) Execution of the Action Plan, and annual reports to the Commission.
- 5) Commission renewal of Partner status, upon review of the annual report.

The process is described in the following paragraphs.

In order to achieve the energy efficiency, reliability and quality of service goals of the Motor Challenge, it is essential that the enterprise call upon properly qualified

¹ By reducing energy use, companies contribute to:

- minimising environmental impact, and in particular reducing CO₂ emissions;
- improving the competitiveness of European industry;
- reducing dependence on imported energy sources, thus improving the security of European energy supplies.

² Companies interested in more information on "Endorser" status are invited to consult the separate Motor Challenge "Endorser Guidelines".

personnel. The personnel should be fully competent in the design and operation of the pertinent types of industrial motor driven systems, and have intimate knowledge of the particular constraints of the enterprise's field of activity.

The Enterprise's engineering staff may be qualified to carry out the five steps of the Motor Challenge. Alternatively, the Enterprise may choose to be assisted by a third party, for instance a Motor Challenge Endorser³. The Commission and National Contact Points can provide lists of Motor Challenge Endorsers who offer such a service. In some cases, National Contact Points, National Energy Agencies or National Programmes may offer some type of aid or financial support.

Note that an external audit is not a condition for submitting an application for Partner status.

1) Inventory and evaluation of Motor Driven Systems.

The Motor Challenge Programme and National Contact Points (list on last page) will propose specific materials to aid the enterprise in:

- establishing the inventory of the current state of the enterprise's Motor Driven Systems:
- evaluating the potential energy savings of system enhancements.

2) Enterprise proposes an Action Plan, defining scope and nature of its commitment.

On the basis of information collected in step 1, the enterprise decides on an Action Plan. This plan must define the **scope** and **nature** of the enterprise's commitment. The commitment will include a proposed reporting scheme.

The **scope** of the commitment defines the production sites at which energy efficiency actions will be undertaken. The enterprise will identify, within the chosen plant sites, the types of motor driven systems to which the commitment applies. The commitment may cover some or all of the following systems (called "Modules" in this document):

- Compressed Air Systems
- Fan Systems
- Pump Systems
- Drives (electric motors and speed controllers) used in the above systems, or in other machinery.

A Partner's commitment may be applicable to all European production sites, to some sites, or may be limited to a single shop at one production site⁴.

³ Endorsers are public or private organisations sharing the goals of the Motor Challenge Programme and agreeing to help the Commission and the National Contact Points in promoting the programme. Some Endorsers may also offer services, equipment or advice, which may help the Partner in implementing a Motor Challenge "Action Plan". Attention is drawn to the fact the Commission does not endorse or guarantee the quality of services and products offered by Endorsers. Therefore partners are advised to check the quality and competence of any service providers they plan to use for Motor Challenge Programme activities.

⁴ Partner status will apply to the entire corporation, or to the shop(s) and site(s) chosen by the company. The scope must be clearly indicated in the proposed commitment. When a company joins the Motor Challenge Programme for a specific site (e.g. an enterprise joining only for plant XY in city

- **Corporate Commitment:** An enterprise will have "Corporate Partner" status if its commitment covers the major proportion of motor electricity consumption (for instance 2/3 of consumption) at all of its European production sites⁵.
- **Site Commitment:** An enterprise may choose one or several of its production sites. Within these sites, it may commit to treating one or several Modules.
- **Shop Commitment:** The commitment may be limited to one or more shops at a production site. In this case, the commitment must cover those Modules that account for the major proportion of motor electricity consumption in the shop. A "shop" is a physically delimited portion of a production installation (for instance, in a specific building) which has a clearly defined function within the production process. Example: a paint shop in an auto assembly plant.

The **nature** of the commitment defines the Action Plan that the enterprise proposes to carry out. The Action Plan will include **specific actions** that have been evaluated and decided upon (investments to upgrade or replace equipment, improved maintenance, etc.). The Action Plan should take into account the recommendations of the Compressed Air, Fan, Pump or Drives "Module" documents relevant to the "scope" of the commitment. These documents provide guidance on typical actions that are recommended to and/or expected of partners.

In addition to these specific actions, Partners are encouraged (but not required) to fix **general principles**, as described in the "Management Policies" Module. This Module proposes tools which can aid in making energy efficiency an element of management priorities, at every step of the life cycle of a motor driven system: system design; choice of system components; installation of systems; ongoing operation and maintenance.

The Action Plan must include a description of the annual report which the Partner would submit to the Commission. The proposed reporting scheme should respect the recommendations and formats of the relevant "Module" documents. The Commission and National Contact Points may aid potential partners in defining the scope and nature of their commitment.

In the Action Plan, the enterprise should designate the person responsible for assuring execution of the plan and for communication with the European Commission and the National Contact Point⁶. This person will:

- verify that appropriate management tools and policies are created to implement the programme;
- report to top management on progress;
- prepare reports to the Commission.

ZZ), this has to be clearly indicated by the Company in all the communication material relating to the Motor Challenge Programme, e.g. web-site, advertisement, etc. The Commission will also indicate the name of the site(s) in all its communication material e.g. web-site, catalogue, posters, etc. More sites/shops can be added to the company commitment and it is always possible to move from a site/shop partnership to a corporate partnership or vice versa.

⁵ This proportion will be applied in a flexible manner. A enterprise may, for instance, choose to exclude a very large turbo air compressor system which represents specific engineering problems for which Motor Challenge tools are inappropriate. The partner should generally include subsidiaries in which the parent enterprise has a controlling share. The partner may choose to include or exclude other partially owned subsidiaries.

⁶ Where applicable.

3) Approval of commitment by the Commission. Granting of Partner status.

The proposed commitment (scope and nature of Action Plan, including reporting procedure) will be submitted to the Commission (see last page for address), with copy to the National Contact Point⁷, which will verify that the plan:

- takes into account the essential recommendations of the relevant Motor Challenge Programme Module documents;
- retains the major part of technically and economically viable energy savings options identified by any audit procedures;
- contains a satisfactory reporting procedure.

The Commission will approve the plan, or explain its reasons for not approving.

If the plan is approved, the Commission will grant MCP Partner status to the enterprise, with all the attending benefits.

4) Partner executes Action Plan, and reports annually to the Commission

The Partner carries out his Action Plan, and reports annually to the Commission and the National Contact Point on progress, in accordance with the reporting scheme proposed by the Partner in step 2. The Partner may be aided in reporting by a third party, for instance an Endorser.

Compliance with Community, national and local regulations will be compulsory for any action or project to be undertaken in the framework of the Programme.

5) Commission evaluates annual report and renews Partner status.

The Commission will review the Partner's annual report, and upon approval, will renew Partner status. Fulfilment of Action Plan commitments may be verified. If the report is not approved, the Commission will explain why. If the execution of the enterprise's action plan is notably weaker than agreed upon, or if the enterprise does not honour its reporting requirements, the Commission reserves the right to terminate the enterprise's participation in the Motor Challenge Programme.

3. Benefits of participating in the Motor Challenge

Motor Challenge Partners will receive aid, advice and technical assistance from the Commission and from participating National Contact Points in formulating and carrying out a Motor Driven Systems energy saving "Action Plan"⁸. The Motor Challenge focuses on Compressed Air, Fan and Pump systems, for which it has been demonstrated that there exists a large technical and economic potential for energy savings. By carrying out the Action Plan, companies will be able to:

⁷ In a country where a National Contact point has not been designated, the material shall be forwarded only to the Commission.

⁸ In some countries, national programmes (financing of assessments or other decision aids, fiscal mechanisms, voluntary agreements, ...) may complement and facilitate participation in the Motor Challenge programme. Please refer to the MCP "Resources" and "National Programme" data bases, available on the Internet at <http://energyefficiency.jrc.cec.eu.int/motorchallenge/>

- maintain or improve both the Reliability and the Quality of Service of the systems concerned;
- realise the major portion of technically and economically feasible energy savings. The plan must satisfy the criterion of economic efficiency, so that the allocation of scarce financial and human resources is justified from the viewpoint of the enterprise.

Furthermore, companies will receive public recognition for their efforts, through the Programme's promotion campaign, aimed at raising public awareness of energy issues.

- Partners may use the Motor Challenge Programme logo⁹. Partners may post signs, artwork of which is provided by the European Commission, publicising their energy saving actions and the contribution they are making to the environment.
- The list of Motor Challenge Partners, including a description of their specific contribution to the Programme will be published widely (brochure, Internet, etc.). The Commission will send the list of Partners to the national Motor Challenge representative (see paragraph 4 below) and to the Member State representatives in the SAVE Committee.
- Partners will be invited to provide documentation of a showcase installation that the European Commission can publicise, providing details on baseline energy use, what was done, and the resulting energy use after the upgrade. The European Commission will provide estimates of pollution prevented.
- The enterprise's relevant activities may be included in Motor Challenge promotional activities, such as Awards and the Catalogue.
- Motor Challenge Programme Awards will be made to outstanding Motor Challenge Partnerships in several categories.

4. Further information

Information on the Motor Challenge Programme is available on the Internet at:

<http://energyefficiency.jrc.cec.eu.int/Motorchallenge/index.htm>

For responses to specific questions, please contact:

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Information on the Motor Challenge is also available from participating National Contact Points (list attached).

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⁹ Use of the logo must respect the limitations defined in "Responsibilities" above.

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EUROPEAN MOTOR CHALLENGE PROGRAMME PARTNERSHIP COMMITMENT SUBMISSION FORM

The organisation/company/institution/authority¹⁰

.....

declares its willingness to participate in the Motor Challenge Programme and to commit itself to carry out the actions described in the attached Action Plan and to adhere to the general principles described in the Motor Challenge Partner Guidelines.

The organisation, through annual reports, will keep the European Commission informed of the implementation of the Action Plan.

The Name of the Motor Challenge manager appointed by the company is:

Name: _____
 Managerial Function: _____
 Address: _____
 Tel. / Fax: _____ / _____
 e-mail/ internet: _____

Director or person authorised to sign for the organisation:

Name: _____
 Managerial Function: _____
 Address: _____
 Tel. / Fax: _____ / _____
 e-mail/ internet: _____
 Signature _____
 Date _____

Please send the signed submission form to :
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Please send copy of the signed submission form to the National Contact Point.

¹⁰ In case of site(s) partnership please indicate clearly the name of the site(s) or shops covered