**FORM 1.4 FOR EVALUATION OF AREAS WITH POTENTIAL EFFECTS OF ECO-INNOVATION AND RESOURCE EFFICIENCY**

|  |
| --- |
| *Number of aspect Title of aspect* |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | First level of addressing aspect – there is no any action | Enterprise is preparing an action to address given aspect | Enterprise address given aspect on a standard basis | Enterprise address given aspect in proactive way | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Source | *Acronyms are provided below* |
| Remark | *Any more detailed specification needed* |
|  |
| **APPLICATIONS** |
| *List of intervention tools suitable for given aspect* |

**NA** *– not applicable – aspect is not relevant for given enterprise*

**WEIGHT:** *A – very important; B – medium importance; C – low importance for given aspect for an enterprise*

*Yellow box – RESULT – lelel of implementation and weight (for example “B3”)*

**Acronyms of sources of information for evaluation of given aspect:**

Int - Interview with enterprise representatives

1.1 - Initial stakeholder analysis

1.2 - initial input - outputanalysis (TOP20)

1.3 - initial analysis of the product life cycle

*Blank aspect table*

|  |
| --- |
|  |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 |  |  |  |  | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |

#

# 1. Relations with stakeholders

|  |
| --- |
| 1.2 Communication with stakeholders on environmental and social impacts |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | No, there is no any communication | Communication is based on legislative requirements. | Communication is based on volunary / proactive reporting. Environmental and / or social profile are (partly) disclosed.  | Communication is based on reports verified by a third party and on continuous proactive dialogue with important stakeholders. | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | 1.1 |
| Rem. | Can include measurement/evaluation of success |
|  |
| **APPLICATIONS** |
| Stakeholder Communication; Pull/Push Information system; Reporting; Dialogue; Stakeholder Marketing (adress the very thing) |

# 2. BUSINESS STRATEGY

|  |
| --- |
| 2.3 Understanding of core competencies (Values) |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | No | Is being prepared | Value creation for customers is understood and documented | Core competencies are fully understood, documented end reveiwed and results are used for proposals of technological and other changes | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | Int |
| Rem. | Question: How is identified value creation for customers? (In conjunction with stakeholder analysis, especially 1.1) |
|  |
| **APPLICATIONS** |
| Business planning tools |

# 3. MANAGEMENT SYSTEM

|  |
| --- |
| 3.4 Are there significant environmental aspects? Is there an effectively operated environmental management system in place? |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | No EMS | EMS is being prepared | EMS is implemented | EMS is effectively implemented (goals for different aspects are defined and progress is monitored) | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | Int |
| Rem. | For evaluation of **WEIGHT** the following approach is recommended: A – very important should be given to an enterprise with significant environmental impacts; B – medium importance with medium importance of environmental impacts; C – low importance for low importance environmental impacts |
|  |
| **APPLICATIONS** |
| EMASEMAS easyISO 14001 |

|  |
| --- |
| 3.9 What is the level of internal democracy and how are employees motivated? |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Strictly hierarchical organisational structure with external motivation only | Enterprise is preparing more democratic environment and more empoweremenet of its members (feedback system exists within a hierarchical system) | Mixture of hierarchical system based on an external motivation and empowerement of enterprise members supporting their inner motivation | Flat management structure based on an inner motivation of enterprise members | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Source | Int |
| Remark | Value A, B, C should reflect importance and/or potential for a more democratic environment within an enterprise. Interview questions can be directed on system of motivation (if it is based more on the traditional and an authoritative hierarchy based on the stick and carrot learership or if enterprise members have sufficient freedom and responsibility to develop an inner motiovation). If an enterprise has problems with its employees keeping the rules and performing their best and people significantly influence enterprise performance, this aspect could be considered important.This aspect addresses also the area of Corporate Social Responsibility (CSR). |
|  |
| **APPLICATIONS** |
| CSR, Freedom in Work |

# 5. PROCESSES

|  |
| --- |
| 5.2 Management of potential to increase energy efficiency |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | No data available | Documentation of energy consumption, (some) energy reduction measures | regular energy audits (internal or external), documentation of energy consumption, benchmarking, good maintenance and training activities, action plan | Monitoring and controlling of energy efficiency data, energy action plan, energy team, energy report,  | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | 1.2 (input/output tables) |
| Rem. |  |
|  |
| **APPLICATIONS** |
| Energy Audit (ISO 16247)Energy saving checklistsEnergy management system (ISO 50001, old ISO 16000)Training planMaintenance plan |

|  |
| --- |
| 5.5 Control of processes and equipment |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Fully manual control by operators | Partly electronic control built into machines | Data acquisition, logging, automatic control cycles | Data acquisition, logging, parameter optimisation, evaluation, training | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | Interview |
| Rem. |  |
|  |
| **APPLICATIONS** |
| KPI, monitoring and controllingTraining planProcess data acquisition system |

|  |
| --- |
| 5.11 Water management |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | No specific analysis or measures | Sources of water consumption known, some measures implemented | A number of water efficiency measures implemented in process and utilities, regular water monitoring and controlling, separation of waste water, recycling of water | A system for managing water efficiency within important cost centres; all documented measures implemented for:* cooling
* cleaning
* rinsing
* transport

Action plan including goals | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. | InterviewSector (question)Technologies used (question)Input/output tables |
| Rem. |  |
|  |
| **APPLICATIONS** |
| Water audit using checklists for:* cooling
* cleaning
* rinsing
* transport

Cleaner Production AssessmentPRESME Toolkit |

# 6. PRODUCTS

|  |
| --- |
| 5.1 Identification of key customers and understanding of their needs and satisfaction related to the product |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We have complaint management and keep a record of reclamation | We send around questionnaires and have key accounts which regularly visit the main clients and discuss our products with them | We include key customers in our design team when we redesign an existing product or develop a new solution (product or service)  | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |
| 5.2 Evaluation of consumption of resources (materials, water and energy) related to the product life cycle |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | Data about the resources consumption are available from different stakeholders and different product life cycle phases | A qualitative or quantitative analysis has been performed | We evaluate the consumption of resources related to each of our products and use that as an indicator when selecting among different design choices (e.g. water footprint) | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.5 Evaluation of waste production related to the product life cycle |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | Data about waste production are available from different stakeholders and different product life cycle phases | A qualitative or quantitative analysis has been performed | We evaluate waste pollution related to each of our products and design to tend towards zero waste/industrial symbiosis | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.6 Use of information about the environmental impacts of the product to communicate its value, also in relation to competing products |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We are starting to evaluate the environmental impacts of our product and investigating which eco labels and type of communication could be more suitable for our goals | We use information about specific environmental characteristics of our product (i.e. CO2 emissions, energy consumptions) in our communication | We assessed the life cycle environmental impacts of our product and have an environmental certification that we use in our communication, also comparing the environmental impacts of alternative products/solutions that provide the same function. | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. | Environmental communication can be addressed to customers as well as distributors and service providers |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.7 Design for material consumption minimization in pre-manufacturing |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We try to minimize the quantity of the most expensive materials we use in our products | We always design to reduce the overall quantity of materials used in our products, e.g. designing to facilitate the shared use of our products or integrating different functions within the same product | We follow different guidelines to develop design choices that reduce the quantity of materials used in our products and their packaging, e.g. considering digitalization, reuse or offering a service, instead of a product, to fulfil the customer’s needs | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.13 Design for the use of not hazardous, of renewable and of recycled materials in manufacturing |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We comply with all the current, relevant regulations, e.g. safety in the workplace  | Apart from compliance, we always select the renewable or recycled option, when available | We design in order to recycle our manufacturing scraps on site | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.22 Design for energy consumption minimization in the use phase |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We are performing some tests to estimate the actual energy quantity our clients use  | Considering the typical user behaviour, we design our products to be energy efficient during the use phase  | We co-design with our users to reduce the energy consumption during the use phase, in order to supply products or services that adapt themselves to the actual needs and behaviour of the users | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.27 Design to strengthen the user-product relation, in order to discourage early disposal of the product and instead favour its repair, maintenance and upgrade |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | We are studying the relation that the user build with our products and the reasons that lead to disposal | We provide after sale services and communication (e.g. websites) to enrich the user experience related to our products | We involve the user in the design and customization of the product | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.34 Design products that enable or promote low-impact lifestyles (e.g. sustainable mobility, healthy recreational activities, reduction of wasteful consumption) |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | To be completed | To be completed | To be completed | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |

|  |
| --- |
| 5.x Design products that are part of a socially sustainable supply/value chain (socially sustainable procurement, e.g. purchased components are not produced using child or forced labour) |
|  |
| **NA** | **Absence** | **Preparation** | **Integration** | **Proaction**  | **WEIGHT** |
| 0 | Nothing has been done yet | To be completed | To be completed | To be completed | ABC |
| 1 | 2 | 3 | 4 |  |
|  |
| Sour. |  |
| Rem. |  |
|  |
| **APPLICATIONS** |
|  |
|  |