## **Annex A Self Evaluation Checklist**

## Resources, Roles, Responsibility and Authority Conformity Requirements Yes No N/A 1. Have the roles, responsibilities and authorities for energy management been defined and documented? 2. Have a Management Representative and an Energy Management Team been designated? 3. Have the roles, responsibilities, and authorities for the Management Representative and Energy Management Team been defined? 4. Have the required resources (e.g. personnel, technology, finance) for implementation and control of the energy management system been provided by the management? 5. Does the personnel appointed in energy management have the competence required?

| Energy Policy  |            |    | (6) |
|--|------------|----|-----|
| Boquiromonto   | Conformity |    | 1   |
| Requirements   | Yes        | No | N/A |
| Has the organisation defined and documented its energy policy?   |            |    |     |
| 2. Is the energy policy appropriate to the nature and the scale of, and the impact on the organisation's energy use and consumption?   |            |    |     |
| 3. Does the policy include commitments to  |            |    |     |
| <ul> <li>continual improvement of energy efficiency?</li> <li>Compliance with applicable legislation and other requirements?</li> <li>support purchase of energy-efficient products and services?</li> </ul> |            |    |     |
| Does the energy policy provide a framework for setting energy objectives and targets?  |            |    |     |
| 5. Has the energy policy been documented, implemented,<br>maintained and communicated to all persons working for or on<br>behalf of the organisation?  |            |    |     |
| 6. Has the energy policy been regularly reviewed and updated?  |            |    |     |



| Legal and Other requirements  |            |    |     |  |  |
|---|------------|----|-----|--|--|
| Doguiromanta  | Conformity |    |     |  |  |
| Requirements  | Yes        | No | N/A |  |  |
| Has a procedure been developed and implemented to identify applicable regulatory, legal and other requirements?   |            |    |     |  |  |
| Has the organisation identified, implemented, and access to the applicable legal requirements and other requirements, which are related to the energy use consumption and efficiency? |            |    | 20. |  |  |
| Has the organisation determined how the applicable legal requirements and other requirements apply to its energy use, consumption and efficiency?                                     |            |    |     |  |  |
| Are current copies of all applicable regulatory and other requirements accessible to personnel as necessary?  |            |    |     |  |  |

| Energy Review, Energy Baseline, and Energy Performance Indicators (EnPI's)   |     |            |     |  |  |
|--|-----|------------|-----|--|--|
| Poguiromento   |     | Conformity |     |  |  |
| Requirements   | Yes | No         | N/A |  |  |
| <ol> <li>Has a procedure been established, implemented and maintained<br/>to identify the baseline and Energy Performance indicators?</li> </ol> |     |            |     |  |  |
| Has energy baseline related to potential significant energy use been considered in establishing and implementing the EnMS?                       |     |            |     |  |  |
| Has the organisation identified the areas of significant energy use?   |     |            |     |  |  |
| Has the organisation determined the current energy performance related to identified significant energy uses?                                    |     |            |     |  |  |
| 5. Are all significant energy uses controlled by objectives, targets, and programmes, procedures or monitoring?                                  |     |            |     |  |  |
| Has the organisation identified other relevant variables affecting significant energy uses?  |     |            |     |  |  |



| Poquiroments   |     | Conformity | у   |
|--|-----|------------|-----|
| Requirements   | Yes | No         | N/A |
| 1. Have documented energy objectives and targets been<br>established at relevant functions and levels within the<br>organisation?  |     | = =        | a   |
| Are the energy objectives and energy targets specific, measurable, concrete and understandable?  |     |            |     |
| 3. Are the objectives and targets consistent with the energy policy?   |     |            |     |
| Has an energy performance evaluation system been established to periodically review the achievement of the objectives and targets?   |     |            |     |
| 5. Have action plans including the following items for the<br>achievement of energy objectives and targets been established<br>and implemented?  |     |            |     |
| <ul> <li>Designation of responsibility for achieving objectives and targets at each relevant function and level of the organisation</li> <li>The means and time-frame by which the programmes are to be achieved</li> <li>The statement of the method by which an improvement in energy performance3 shall be verified; and</li> <li>The statement of the method of verifying the results of the action plans</li> </ul> |     |            |     |



| Paguiramanta  |     | Conformity | <u>'</u> |
|---|-----|------------|----------|
| Requirements  | Yes | No         | N/A      |
| <ol> <li>Are all the personnel, related to significant energy uses,<br/>competent on the basis of appropriate education, training, skills<br/>or experience?</li> </ol>   |     |            |          |
| 2. Have training needs associated with the control of its significant energy uses and the operation of its EnMS been identified?  |     |            |          |
| <ul> <li>3. Have procedures been established to assure that all the personnel working for or on behalf of the organisation are aware of</li> <li>the importance of conformity with the energy policy, procedures and the requirements of the EnMS?</li> </ul>         |     |            |          |
| <ul> <li>their roles, responsibilities and authorities in achieving<br/>the requirements of the EnMS?</li> </ul>  |     |            |          |
| <ul> <li>the benefits of improved energy performance?</li> </ul>  |     |            |          |
| <ul> <li>the impacts, actual or potential of their activities and<br/>how their activities and behaviour contribute to the<br/>achievement of energy objectives and targets and the<br/>potential consequences of departure from specified<br/>procedures?</li> </ul> | 10  |            |          |



| Communication   |     |            |     |
|---|-----|------------|-----|
| Boquiromento  | (   | Conformity | 7   |
| Requirements  | Yes | No         | N/A |
| Does the organisation communicate internally with regard to its energy performance and the EnMS?  |     | 2 2        | ā   |
| Are procedures maintained for communication of energy issues between various levels of the organisation?  |     |            |     |
| Has the organisation established and implemented a process by which any person working for, or on behalf of, the organisation can make comments or suggestions to EnMS? |     |            |     |
| Has the organisation decided whether its energy policy, EnMS and energy performance should be communicated externally?  |     |            |     |
| If so, are there any documented and implemented external communication plans?   |     |            |     |

| Documentation   | St.V       |    |     |
|---|------------|----|-----|
| Doguiromanto  | Conformity |    |     |
| Requirements  | Yes        | No | N/A |
| Have the core elements of the EnMS and their interaction been documented in paper and/or electronic form? |            |    |     |
| <ul><li>2. Are the following EnMS elements documented?</li><li>Scope and boundaries of the EnMS</li></ul> |            |    |     |
| Energy policy   |            |    |     |
| <ul> <li>Energy objectives, targets and action plans; and</li> </ul>                                      |            |    |     |
| Documents required by ISO 50001, e.g. energy review   |            |    |     |



| Control of Documents  |            |    |                  |  |
|---|------------|----|------------------|--|
| Requirements  | Conformity |    |                  |  |
| Requirements  | Yes        | No | N/A              |  |
| Are procedures maintained to ensure periodic review and appropriate approved distribution and revision of all required documents? |            |    | ā                |  |
| Are current versions and changes of all required documents identified?  |            |    |                  |  |
| Are documents of external origin that are to be necessary for the planning and operation of the EnMS identified and controlled?   |            |    |                  |  |
| Is all documentation legible, readily retrievable and identifiable, and revision level or date identified?                        |            |    |                  |  |
| Are obsolete documents promptly removed or otherwise assured against unintended use?  |            |    | l <sub>a</sub> l |  |

| Operational Control   |            |    |     |
|---|------------|----|-----|
| Requirements  | Conformity |    |     |
| Requirements  | Yes        | No | N/A |
| 1. Have the operations and maintenance activities, which are<br>related to significant energy uses and are consistent with energy<br>policy, objectives and action plans, been identified and planned<br>with the following considerations? |            |    |     |
| <ul> <li>Establishing and setting criteria for the effective operation and maintenance of significant energy uses;</li> </ul>   |            |    |     |
| <ul> <li>Operating and maintaining facilities, processes,<br/>systems and equipment in accordance with operational<br/>criteria; and</li> </ul>   |            |    |     |
| <ul> <li>Appropriate communication of the operational controls<br/>to personnel working for the organisation.</li> </ul>  |            |    |     |



| De         | sign   |     |    |     |
|------------|--|-----|----|-----|
| Conformity |  |     |    | 1   |
| K          | equirements  | Yes | No | N/A |
| 1.         | Have procedures been implemented to identify and consider energy performance improvement opportunities and operational controls in the design of new, modified and renovated facilities, equipment, systems and processes? |     |    | all |
| 2.         | Are the design considerations documented?  |     |    |     |

| Pro          | Procurement of Energy Services, Products, Equipment and Energy  |            |    |     |  |  |
|--------------|---|------------|----|-----|--|--|
| Doguiromento |   | Conformity |    |     |  |  |
| Nec          | Requirements  |            | No | N/A |  |  |
| 1.           | Have the criteria for assessing energy use, consumption and efficiency over the lifetime of the product, equipment or service been established and implemented? |            |    |     |  |  |
| 2.           | Are specifications for items being purchased clearly defined and documented in the energy performance related requirements?                                     |            |    |     |  |  |
| 3.           | Have energy performance related requirements been communicated to suppliers?  |            |    |     |  |  |
| 4.           | Have suppliers been made aware that energy performance is part of the evaluation criteria?  |            |    |     |  |  |



| Monitoring and Measurement  |            |    |       |            |   |
|---|------------|----|-------|------------|---|
| Requirements  | Conformity |    | Confo | Conformity | / |
| Requirements  | Yes        | No | N/A   |            |   |
| <ol> <li>Have procedures been documented and implemented to monitor the following key characteristics of operations that can have significant impacts?         <ul> <li>Significant energy uses and other outputs of the energy review</li> <li>Relevant variables related to significant energy uses;</li> <li>Energy performance indicators (EnPIs);</li> <li>Effectiveness of the action plans in achieving objectives and targets; and</li> <li>Evaluation of actual versus expected energy consumption.</li> </ul> </li> </ol> |            |    | F4    |            |   |
| Are records available to track performance and conformity with the key characteristics?   |            |    |       |            |   |
| Has the energy measurement plan been defined and implemented?   |            |    | (9)   |            |   |
| Are all monitoring equipment appropriately maintained and calibrated?   | V          |    |       |            |   |

| Evaluation of Compliance  |            |    |     |
|---|------------|----|-----|
| Requirements  | Conformity |    |     |
|   | Yes        | No | N/A |
| Are documented procedures established, implemented and maintained for periodical evaluation compliance with relevant energy legislation and other requirements related to energy use and consumption? |            |    |     |
| Is the compliance status with regard to relevant energy legislation and other requirements related to energy use and consumption evaluated?   |            |    |     |



| Internal Audit   |            |     |     |
|--|------------|-----|-----|
| Requirements   | Conformity |     |     |
| Nequilements   | Yes        | No  | N/A |
| Have internal audit procedures been developed and implemented?   |            | = = | E4  |
| 2. Has the internal audit schedule been developed?   |            |     |     |
| 3. Are the internal audits conducted to ensure that the EnMS   |            |     |     |
| <ul> <li>conforms to planned arrangements for energy<br/>management according to ISO 50001 standard<br/>requirements?</li> </ul> |            |     |     |
| <ul> <li>conforms with the energy objectives and targets<br/>established?</li> </ul>   |            |     | 121 |
| <ul> <li>is effectively implemented and maintained, and improves<br/>energy performance?</li> </ul>                              | _          |     | *   |
| 4. Are audit reports and records documented?   |            |     |     |
| 5. Are the auditors conducting the audits competent and in a position to conduct the audits objectively and impartially?         |            |     |     |



| Requirements   | Conformity |    |     |
|--|------------|----|-----|
|  | Yes        | No | N/A |
| Have procedures been established to define the responsibility for handling, investigating and controlling, and mitigating nonconformity?                                   |            |    | ā   |
| Does the organisation address the actual and potential nonconformities by making corrections, and by taking corrective and preventive actions with the following elements? |            |    |     |
| Reviewing nonconformities or potential nonconformities;  |            |    |     |
| <ul> <li>Determining the causes of nonconformities or potential nonconformities;</li> </ul>  |            |    |     |
| <ul> <li>Evaluating the need of action to ensure that<br/>nonconformities do not occur or recur;</li> </ul>  |            |    |     |
| <ul> <li>Determining and implementing the appropriate action needed;</li> </ul>  | i.         |    |     |
| <ul> <li>Maintaining records of corrective and preventive actions; and</li> </ul>  |            |    |     |
| <ul> <li>Reviewing the effectiveness of the corrective and preventive actions taken</li> </ul>   |            |    |     |
| Are procedures changed and / or updated as a result of corrective action and preventive action?  |            |    |     |



|  |     | Conformity | у   |
|--|-----|------------|-----|
| Requirements   | Yes | No         | N/A |
| Have procedures been established and implemented for the identification, retrieval and retention of records? |     | 20 g       |     |
| Are records legible, identifiable and traceable to the relevant activities?                                  |     |            |     |
| 3. Does the organisation retain the following records?   |     |            |     |
| Training records;  |     |            |     |
| Audit results;   |     |            |     |
| <ul> <li>Management review records;</li> </ul>   |     |            |     |
| <ul> <li>Information on applicable energy laws and other requirements;</li> </ul>                            | 59  |            |     |
| <ul> <li>Inspection,maintenance and calibration records;</li> </ul>  |     |            |     |
| <ul> <li>Informationon significant energy use and energy<br/>performance indicators;</li> </ul>              |     |            |     |
| <ul> <li>Procurement records;</li> </ul>   |     |            |     |
| • Permits;   |     |            |     |
| <ul> <li>Monitoring data;</li> </ul>   |     |            |     |
| <ul> <li>Details of nonconformities, incidents, complaints and follow-up actions;</li> </ul>                 |     |            |     |
| <ul> <li>Contractors and suppliers records;and</li> </ul>  |     |            |     |
| <ul> <li>Process and product information.</li> </ul>   |     |            |     |



| Management Review  |            |    |     |  |
|--|------------|----|-----|--|
| Requirements   | Conformity |    | _   |  |
|  | Yes        | No | N/A |  |
| Do periodic management reviews take place to ensure the continuing suitability, adequacy and effectiveness of the EnMS?  |            |    |     |  |
| 2. Are management review records retained?   |            |    |     |  |
| <ul> <li>3. Are the management reviews carried out based on the following documents or information?</li> <li>EnMS audit reports;</li> <li>Evaluation of compliance with legal requirements and other requirements to which the organisation subscribes;</li> <li>Achievement of EnMS objectives and targets;</li> <li>Communications and complaints on EnMS internally;</li> <li>Energy policy;</li> <li>Energy performance and related Energy performance indicators (EnPIs) of the organisation;</li> <li>Status of corrective and preventive actions;</li> <li>Follow-up actions from previous management reviews;</li> <li>Projected energy performance of the following period;</li> <li>Changing circumstances, including developments in legal and other requirements related to its energy use; and</li> <li>Recommendations for improvement.</li> </ul> |            |    |     |  |
| <ul> <li>4. Are the management reviews included in the decisions or actions related to: <ul> <li>Energy performance of the organisation;</li> <li>Energy policy;</li> <li>Energy performance indicators (EnPIs);</li> <li>Objectives and targets of the EnMS; and</li> <li>Allocation of resources.</li> </ul> </li> </ul>   |            |    |     |  |

