

Guidance for completion of this Performance Account Template

In this Target Period 6 (TP6) Performance Account Template operators should set out the changes in energy efficiency or carbon emissions that have contributed to performance reported for TP6. It should be completed at TU level but should consider action taken at Facility level as contributions to the TU performance may vary between individual Facilities.

A separate Sector Abatement Measures list will be provided for information; it gives a list of abatement measures that have previously been relevant for the Sector as a prompt for the range of abatement actions that may be included in the TP6 Performance Account tab.

The guidance covers:

1. Data Needed – an explanation of the data input required.
2. Data Accuracy – a steer on the data estimation required.
3. Savings Actions to Account For – a suggested approach to simplify covering savings from the base year.
4. Categorising Contributions to TP6 Performance – an explanation of how savings opportunities should be categorised – not all categories may be relevant.
5. Completion of the Performance Account – considerations for completing the template.

1 Data Needed

Data should be input to:

- Green cells: free text and values
- Yellow cells: selection from drop down lists

Blue cells contain formulas and are locked.

The data needed is as follows:

- [Cell D3] The TU Identifier which should match that in the CCA register (that is the TU reference number).
- [Cell D4] The Operator name which should match that in the CCA register.
- [Cell D5] Selection of the TU's TP6 target type from the dropdown options as per the underlying agreement.
- [Cell D6] The TU's TP6 % Target as per the underlying agreement.
- [Cell D7] The TP6 % Performance Achieved (which should match that in the latest version of the TP6 target period report submitted to the EA). A positive % for improved performance or a negative % if performance has declined.
- [Cell D10] Selection from the drop down (Yes/No) in terms of whether this period's performance was impacted by any implemented measure. If 'Yes' proceed to column B, if 'No' please enter supporting text in Cell F10.

- [Column B] Input facility Identifier that the measure relates to which should match that in the CCA register.
- [Column C] Select a category the measure best relates to from the drop down list.
- [Column D] Free text description of each savings action implemented. See Section 4 of this guidance below for further explanation of the actions that need to be included.
- [Column E] Free text explanation of reasons and opportunities for implementation, for example a need to replace end of life equipment during scheduled maintenance.
- [Column F] The implementation dates which do not need to be precise but should be considered in estimating how much of the Target Period would have benefitted from a change (see further explanation for column G data input below)
- [Column G] Selection from the drop-down options of whether the savings action is believed to be most applicable to fixed, variable (throughput related) or fixed and variable energy consumption or carbon emissions. The answer given should be considered in estimating the contribution to savings; savings achieved on fixed energy would apply regardless of throughput, savings achieved on variable (throughput related) energy could be increased or reduced by a change in throughput relative to the baseline.
- [Column H] The % of the energy consumption or carbon emissions (according to whether the target was in energy or carbon terms) that has been impacted by the action taken. The energy consumption or carbon emissions considered must be only those in the Target Unit, that is excluding any ETS energy. For example, if the action applied to a particular fuel, this would be the percentage of energy consumed from that fuel relative to the total energy consumed.
- [Column I] The extent of implementation, effectively the increase in the penetration of the measure. For example, if 50% of a particular component has been replaced with a new model, the figure input would be 50%. The figure input here should also be adjusted to account for the implementation date, that is the proportion of the Target Period that the change would have applied for. For instance, if 50% of a particular component was replaced halfway through the period over which performance has improved it would only contribute as if 25% of the component had been replaced.
- [Column J] The expected % saving for the change made, the improved efficiency. For example, if a particular component is replaced with a new model that is 5% more efficient then input 5%. The % saving expected should also consider whether the performance target is in energy or carbon terms. For an energy target an action could potentially cause a negative improvement in energy terms (e.g. biomass heating) in which case a negative % saving should be given. For a carbon target the same action should give a significant positive % saving. Note the % savings value input in this column should not be adjusted to account for implementation date. Keeping the data in this column unadjusted for effects such as implementation data makes it easier to check that figures are within reasonable bounds for the technology change made.
- [Column M] Notes that might be useful for further reference. Operators may wish to add some notes for their benefit or may leave this column blank.

A brief explanation of the data requirements is also provided within the TP6 Performance Account tab (row 13) as a convenient reminder whilst completing it.

2 Data Accuracy

Data to complete columns H, I and J need only be estimates if no underpinning data is available. The key consideration is whether the calculated contribution that each savings action makes to the TP6 performance is in proportion relative to each other action - there is a logical estimate of how much each action has contributed. By comparing data for similar savings actions from several submissions DESNZ and Sector Associations will be able to consider the range of estimates, identify illogical outliers, and build more understanding of the contributions savings actions are making. Over time it is anticipated that improving this understanding could be beneficial to Operators in prioritising future investments.

Where possible each contribution should be estimated using a logical approach for instance:

- For planned investments in efficiency improvements an estimate of the savings and payback may have been developed to support the management decision to invest.
- Efficiency improvements from replacement of failed equipment/components may be estimated by considering the old and new manufactures ratings or other means according to data available.
- Efficiency improvements arising from process and product changes may be estimated by looking at changes in monthly or weekly Specific Energy Consumption or Specific Carbon Consumption, energy bills, or other means according to data available.

Overall, the contribution estimates must be adjusted as appropriate to account for the TP6 performance reported. The performance reporting template calculates performance to 3 decimal places to avoid rounding errors in the calculation of surplus or buyout. It is sufficient to match the performance contributions in this template with the performance reported at 1 decimal place, that is to 0.1%.

3 Savings Actions to Account For

The savings to account for are those which have contributed to TP6 performance. These may have been investments made before TP6 but only implemented or has had an impact on performance within the period being accounted for. Investments currently being implemented may have little or no impact on TP6 performance depending on their implementation date.

TP6 performance is relative to the TU baseline which will generally be 2018 except for new entrant Facilities. This means that the Performance Account needs to cover the improvement in performance since the baseline, not just TP6. A single line may be added into the account in the 'Other Contributions category' (see Section 5 for an explanation of the categories) to cover the performance achieved at TP5. For example, if the TP5 performance achieved was 5.5% the following data could be input to support that progress.

Select the relevant categories for each action implemented.	List the savings actions implemented. You may explain the savings actions in your own words (describing the changes that were made covering all appropriate operational changes, process changes, equipment replaced, infrastructure changes etc), or alternatively you can copy and paste actions from the Potential Abatement Measures list tab.	Reasons for Implementation may be explained in your own words covering the circumstances enabling implementation and the technical/economic case. Reasons might include for example: - Need to replace equipment at end of life - Planned and costed improvement - Further penetration of measure already implemented - Insulation upgrade during scheduled maintenance - Planned refurbishment during shutdown - Planned replacement building plant	Enter an approximate implementation date when the savings actions were implemented	Select whether the action taken affects the: - Fixed - Variable (related to production) or - Fixed and variable components of either energy consumption or carbon emissions	Enter the estimated proportion % of energy consumption or carbon emissions impacted by the measure implemented. The energy consumption or carbon emissions considered must exclude any related to ETS activities. For example if the action applied to a particular fuel then this would be the percentage of energy consumed from that fuel relative to the total energy consumed.	Enter the extent of implementation, effectively the increase in penetration of the measure. For example if 50% of a particular component has been replaced with a new model the figure input would be 50%.	Enter the % savings for the change made, the improved efficiency. For example if a particular component is replaced with a new model that is 5% more efficient then enter 5%. An action could potentially cause a negative improvement in energy terms (eg biomass heating) in which case a negative % saving may be given.
Category	Savings Actions Implemented	Reasons for Implementation	Implementation Date	Fixed Energy Consumption or Carbon Emissions Impacted?	Energy Consumption or Carbon Emissions Impacted (%)	Expected extent (penetration) of the change implemented (%)	Expected % savings from the change implemented (%)
Other Contributions	TP5 performance achieved	This line accounts for the TP5 performance achieved.	30/03/2022	Fixed and Variable	100.0%	100.0%	5.5%

This is an illustration of what can be input to account for the contribution to your TP5 performance

A more detailed breakdown is then only required for contributions to the change in performance between TP6 and TP5. Note this means contributions from 2023 and 2024 need to be accounted for unless the TU has a base year within 2023 or 2024. If preferred a detailed breakdown of contributions to the change in performance from the baseline could be provided.

4 Categorising Contributions to TP6 Performance

Contributions to TP6 performance may arise from:

- Investments in efficiency improvements (energy consumption reduction and/or carbon emissions reduction), planned or arising from maintenance and repair.
- Changes in the processes carried out, products produced and productivity in response to market demand, new standards, lightweighting of packaging, power disruption, etc.

Each contribution should be categorised into different types of energy demand and supply side measures, not all of these may be feasible/applicable depending on a TU's energy requirements. The purpose of this categorisation is to provide understanding of the balance between different types of savings opportunities that are currently contributing to performance. It is anticipated that this balance will change over time, for instance opportunities for energy demand efficiency improvements may have already been largely implemented for some TUs and the focus for their current investments may be on reducing energy supply through measures such as the introduction of heat pumps.

Demand:

- Energy Management: Savings that may be attributed to operational changes including objectives, targets and actions identified in an Energy Management System assessment such as ISO 50001.
- Process Optimisation: Savings that may be attributed to processes changes including on-siting and off-siting of process steps and changes that increase as well as decrease energy consumption or carbon emissions.
- New Technology Uptake: Savings that may be attributed by changing to the latest components/equipment/appliances (for instance those on the Energy Technology List <https://www.gov.uk/guidance/energy-technology-list>).
- Insulation Improvement: Savings that may be attributed to insulation improvements, retrofit and/or upgrade to specific equipment/plant/buildings.
- Infrastructure Improvement: Savings that may be attributed to refurbishment or complete replacement of infrastructure such as buildings and plant (built on site as opposed to bought in equipment/appliances).

Supply:

- Switching Non-renewable Fuels: Savings that may be attributed to switching of non-renewable fuels such as from Fuel Oil to Natural Gas for space heating. In some cases, there may be an increase in carbon emissions.
- Heat Recovery: Savings that may be attributed to the introduction or expansion of recovering heat from the environment or wasted by Facility activities and turned into useful energy. This is similar to fuel switching but the fuel and efficiency of the equipment/appliance used to recover the heat should be considered.

- Switching to Combined Heat and Power (CHP): Savings that may be attributed to the introduction or expansion of CHP use (note that the % estimates should account for the Primary CHP plant fuel consumed to provide electricity and heat).
- Switching to Biomass Heating: Savings that may be attributed to the introduction or changes in the supply of renewable heat.
- Switching to Renewable Power: Savings that may be attributed to the introduction or changes in the supply of renewable electricity generation (Photovoltaic (PV), Wind and Hydro). Note the savings may be discounted where the primary to delivered energy factor of 2.6 applies, that is where renewable electricity is counted as if it came from the Grid.

A category is also provided to cover other factors affecting performance, which could include changes in the processes carried out, products produced and productivity in response to market demand, new standards, lightweighting of packaging, power disruption, etc.

- **Other Contributions:** These may be any factors besides abatement measures that contributed to the TP6 performance. For example if energy consumption for heating was lower because of a warmer winter in 2023/24 then this contribution to performance may be estimated: the % in column H would be for the proportion of energy consumption used for heating, the % in column I would be 100% as warmer weather would affect all heating demand, the % in column J would be the contribution estimate to the overall TP6 improvement arising from the warmer winter. Another example could be on-siting a process step such as secondary packaging that had previously been undertaken elsewhere and increased total energy consumption by 1%. This could be input by setting column H to 1%, column I to 100%, and column J to -100%. Operators are free to account for contributions by setting the three values in columns H, I and J as they consider most appropriate and may also seek advice from Sector Associations and/or DESNZ. Such advice would aim to help achieve some consistency in approach where contributions are common across the sector.

5 Completion of the Performance Account

Operators may input contributions to the template as TP6 progresses but should review and complete the template when they know their TP6 performance, that is when their TP6 Performance Report is ready for submission to the Environment Agency. Operators that do not calculate their TP6 performance result themselves should obtain it from their Sector Association when it is ready for reporting to the Environment Agency.