

|  | 2021/2022<br>YTD Outturn (€m) | 2020/2021<br>YTD Outturn (€m) | 2021/2022<br>Q2 Outturn (€m) | 2020/2021<br>Q2 Outturn (€m) |
|--|-------------------------------|-------------------------------|------------------------------|------------------------------|
| CPREMIUM   | 111.2                         | 70.1                          | 55.9                         | 36.1                         |
| CDISCOUNT  | 136.4                         | 49.9                          | 67.8                         | 22.4                         |
| CABBPO   | 0.4                           | 0.1                           | 0.2                          | 0.0                          |
| CAOOPO   | -4.6                          | -0.5                          | -2.6                         | -0.2                         |
| CTEST  | 0.0                           | -0.1                          | 0.0                          | 0.0                          |
| CUNIMB   | -7.4                          | -1.2                          | -4.0                         | -0.5                         |
| CCURL  | -7.0                          | -1.1                          | -4.5                         | -0.7                         |
| <b>Dispatch Balancing Costs (DBC)</b>                | <b>228.9</b>                  | <b>117.1</b>                  | <b>112.8</b>                 | <b>57.1</b>                  |
| <b>Fixed Cost Charges/Payments (CFC)</b>             | <b>45.2</b>                   | <b>15.6</b>                   | <b>30.0</b>                  | <b>10.0</b>                  |
| <b>Other System Charges (OSC) <sup>[1]</sup></b>     | <b>-2.8</b>                   | <b>-8.9</b>                   | <b>-1.1</b>                  | <b>6.9</b>                   |
| <b>Imperfections Costs Outturn</b>                   | <b>271.4</b>                  | <b>123.8</b>                  | <b>141.7</b>                 | <b>74.1</b>                  |
| <b>Imperfections Costs Forecast</b>                  | <b>210.9</b>                  | <b>154.1</b>                  | <b>112.8</b>                 | <b>83.9</b>                  |
| <b>Variance: Forecast Vs. Outturn <sup>[2]</sup></b> | <b>60.4</b>                   | <b>-30.3</b>                  | <b>28.9</b>                  | <b>-9.8</b>                  |
| <b>Variance %</b>                                    | <b>28.7%</b>                  | <b>-19.7%</b>                 | <b>25.6%</b>                 | <b>-11.7%</b>                |

### Key Points

- Costs for the 21/22 year are based on actual initial settlement figures. There will be variations in the final year-end figures as a result of resettlement, system defect fixes and Trading and Settlement Code modifications.
- The Imperfections Cost Forecast is profiled based on the RA approved model, which assumed zero payments for OSC.
- The Imperfections Cost Outturn is subject to fluctuation relative to the forecast.
- Costs for the 20/21 year are based on M+4 & M+13 settlement figures where available. <sup>[3]</sup>

| Key Factors Affecting Imperfections Costs                  | Forecast Assumptions for TY2021-22 <sup>[11]</sup> | Actual TY2021-22   | Impact <sup>[12]</sup> |
|--|--|--|------------------------|
| T&S Code and System Changes                                | Data as per forecast submission                    | Changes as a result of Modification Mod_02_21(26/01/22) have likely increased imperfections costs.   | ↑                      |
| Reserve Policy and TCGs <sup>[4]</sup>                     | TCG data as forecast per submission                | There were still a number of must run TCGs for system security reasons, which has increased imperfections costs.   | ↑                      |
| Reserve Provision  | Data as per forecast submission                    | Inclusion of 145 MW (IE) battery reserve since Q1 has resulted in a reduction of minimum regulating IE POR. This has lowered imperfection costs.   | ↓                      |
| System Demand  | Data as per forecast submission                    | Actual system demand was broadly in line with the forecast. This typically had minimal impact on imperfections cost.   | →                      |
| Forced Generation Outages                                  | Data as per forecast submission                    | The average forced outage rate for the quarter was 18.63% <sup>[5]</sup> ; forecast assumed 21.85% forced outage rate. This difference has likely decreased imperfections costs.   | ↓                      |
| Scheduled Generation Outages                               | Data as per forecast submission                    | The scheduled generation outages were broadly in line with the forecast and had minimal impact on imperfection costs.  | →                      |
| Forced Transmission Outages                                | No outages forecast                                | The unplanned outages increased imperfections costs.   | ↑                      |
| Scheduled Transmission Outages                             | Data as per forecast submission                    | The scheduled transmission outages were less than forecast and decreased imperfection costs.   | ↓                      |
| Commercial Offer data - Fuel Costs & Carbon <sup>[6]</sup> | Data as per forecast submission                    | Wholesale fuel prices for the quarter were as follows; Carbon: 85% higher than forecast, Coal: 214% higher than forecast, Gasoil: 82% higher than forecast, Gas: 180% higher than forecast, Oil: 69% higher than forecast. This difference increased imperfections costs for the period. | ↑                      |
| Wind Variability   | Data as per forecast submission                    | Installed all-island capacity at end of period: 5683.1 MW <sup>[7]</sup> , which is slightly below forecast. The average wind capacity factor for the quarter was 38%, which is in line with the forecast. These had minimal impact on imperfection costs.                               | →                      |

## Mitigation Measures

The following are a list of mitigation measures undergoing review to seek to increase downward pressure on imperfection costs:

1. Daily review of Non-Compliances / Performance Monitoring events e.g. trips;
2. Weekly review of imperfections costs and drivers;
3. On-going review of Reserve Policy and TCGs [5];
4. Flexibility services as required;
5. Grid Code/ Trading and Settlement Code review and modifications;

## Notes

[1] Includes Other System Charges up to Mar 2022. Published at [www.eirgridgroup.com](http://www.eirgridgroup.com) and [www.soni.ltd.uk](http://www.soni.ltd.uk).

[2] Positive value indicates outturn is higher than forecast. Negative value indicates outturn is lower than forecast.

[3] M+13 have been completed upto Week 11 TY 20/21 and M+4 have been completed for the TY 20/21.

[4] TCGs (Transmission Constraint Groups) or Operational constraints as published on the SEMO website: <https://www.semo.com/publications/tso-responsibilities/>.

[5] Calculated from the average monthly all-island forced outage rates from January 2022 to March 2022.

[6] The forecast and actual fuel and carbon costs were based on data taken from Thomson Reuters.

[7] The installed wind capacity is the February 2022 figure as published on [www.eirgridgroup.com](http://www.eirgridgroup.com) and <https://www.soni.ltd.uk>

[8] Forecast is over an annual time horizon. Information and figures are for this period unless otherwise stated. Forecast assumptions are published at: <http://www.semcommittee.eu>

[9] Increase from Forecast



Decrease from Forecast



No Change from Forecast



## Component Description

**Fixed Cost Charges/Payments: Payments for additional fixed costs incurred, or charges for fixed costs saved from dispatching a unit differently to its market position, if not sufficiently covered through the unit's other payments or charges.**

**Dispatch Balancing Costs: are made up of the following components:**

• **CPREMIUM: Paid when an offer is scheduled in balancing (and delivered) at an offer price above the imbalance settlement price.**

• **CDISCOUNT: Paid when a bid is scheduled in balancing (and delivered) at a bid price below the imbalance settlement price.**

• **CABBPO/ CAOPO: Bid Price Only and Offer Price Only Payments and Charges, adjustment payment or charge to result in net settlement at the offer price for increments, or bid price for decrements, for undo actions on generators.**

• **CCURL: Adjustment payment or charge to result in net settlement at a specific curtailment price for curtailment actions on generators.**

• **CTEST: Charges applied to units under test.**

• **CUNIMB: Charges for imbalances, and bids and offers accepted in balancing but not delivered, which were outside of a tolerance. Undelivered quantities are settled at the imbalance settlement price.**