

	2021/2022	2020/2021	2021/2022	2020/2021
	YTD Outturn (€m)	YTD Outturn (€m)	Q4 Outturn (€m)	Q4 Outturn (€m)
CPREMIUM	192.0	127.4	35.3	33.0
CDISCOUNT	255.9	134.3	64.8	49.3
CABBPO	0.7	0.3	0.2	0.1
CAOOPO	-6.2	-1.1	0.0	-0.2
CTEST	0.0	-0.5	0.0	-0.2
CUNIMB	-13.3	-3.4	-3.6	-1.8
CCURL	-7.9	-1.8	-0.1	-0.5
CEADSU ^[1]	0.8	0.0	0.0	0.0
Dispatch Balancing Costs (DBC)	422.0	255.2	96.5	79.7
Fixed Cost Charges/Payments (CFC)	96.0	22.5	30.8	-0.4
Other System Charges (OSC) ^[2]	-5.7	-3.8	-1.1	-1.0
Imperfections Costs Outturn	512.3	273.9	126.1	78.3
Imperfections Costs Forecast	341.0	301.5	67.7	66.1
Variance: Forecast Vs. Outturn ^[3]	171.3	-27.6	58.5	12.2
Variance %	50.2%	-9.2%	86.5%	18.5%

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.
- CEADSU charge component inclusion as a result of end of year assessment and will appear going forward. ^[1]
- Costs for the 20/21 year are based on M+4 & M+13 settlement figures were available. ^[4]

Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY2021-22 ^[8]	Actual TY2021-22	Impact ^[9]
T&S Code and System Changes	Data as per forecast submission	Changes as a result of Modification Mod_02_21 has likely increased imperfections costs.	↑
Reserve Policy and TCGs ^[5]	TCG data as forecast per submission	There was slight variation in 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 has minimal impact on imperfections cost.	→
Forced Generation Outages	Data as per forecast submission	The average forced outage rate for the quarter was 28.56% ^[6] ; forecast assumed 19.6% forced outage rate. This difference has increased imperfections costs.	↑
Scheduled Generation Outages	Data as per forecast submission	The scheduled generation outages were higher than the forecast and a significant increase in number of days required. This difference has increased imperfections 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 greater than forecast and increased imperfection costs.	↑
Commercial Offer data - Fuel Costs & Carbon ^[7]	Data as per forecast submission	Wholesale fuel prices for the quarter were as follows; Carbon: 191% higher than forecast, Coal: 147% higher than forecast, Gasoil: 59% higher than forecast, Gas: 313% higher than forecast, Oil: 48% 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 ^[8] , which is slightly below forecast. The average wind capacity factor for the quarter was 17%, which is lower than forecast. These had 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 [4];
4. Flexibility services as required;
5. Grid Code/ Trading and Settlement Code review and modifications;

Notes

[1] CEADSU is a specific charge in relation to DSU State Aid Compliance Interim Approach Energy payments as implemented in the decision paper ([SEM-19-029](#)).

[2] Includes Other System Charges up to and including Sep 2022. Published at [www.eirgridgroup.com](#) and [www.soni.ltd.uk](#).

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

[4] M+13 have been completed up to Week 35 TY 20/21 and M+4 have been completed for the TY 20/21.

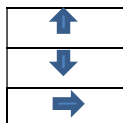
[5] TCGs (Transmission Constraint Groups) or Operational constraints as published on the SEMO website: <https://www.sem-o.com/publications/tso-responsibilities/>.

[6] Calculated from the average monthly all-island forced outage rates for quarter.

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

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

[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.**

• **CEADSU: Energy payments for DSUs at the times of energy scarcity when imbalance price exceeds the strike price.**

• **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.**