

Dashboard - Levels of Total Unidentified Gas

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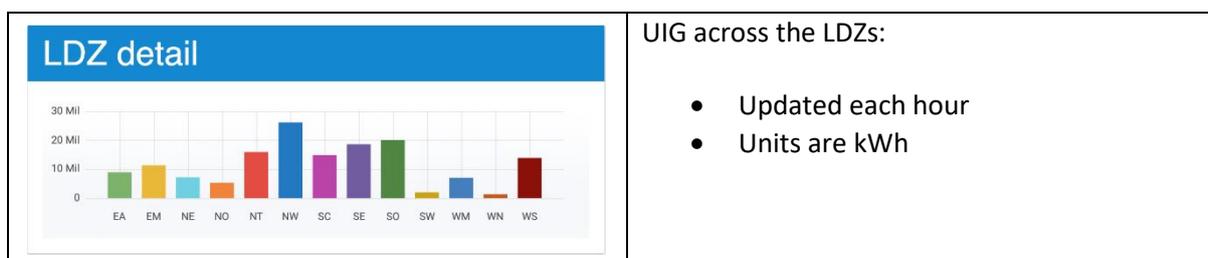
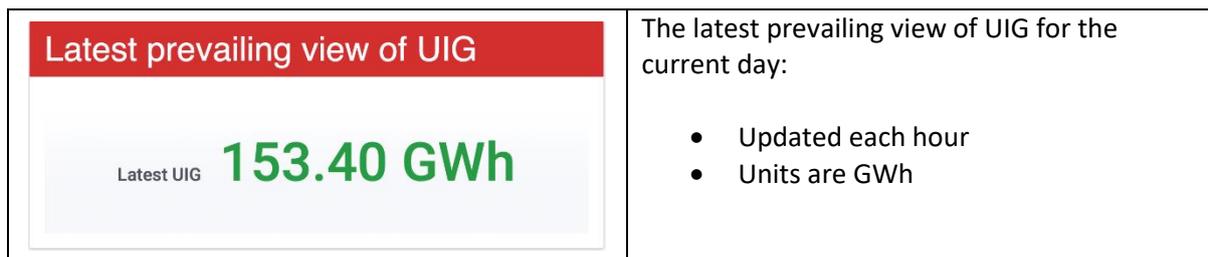
A dashboard has been created to support industry and DESC analysis of Unidentified Gas. There is a lack of visibility on UIG, for example, daily variability that is related to weather conditions and calendar effects. A near real time and more granular reporting of UIG will assist in targeting analysis and further improvements in Demand Estimation to reduce UIG.

DESC views are sought on what information would be useful to include in the dashboard while it is being developed.

The dashboard can be viewed at <https://www.gasanalytics.co.uk>

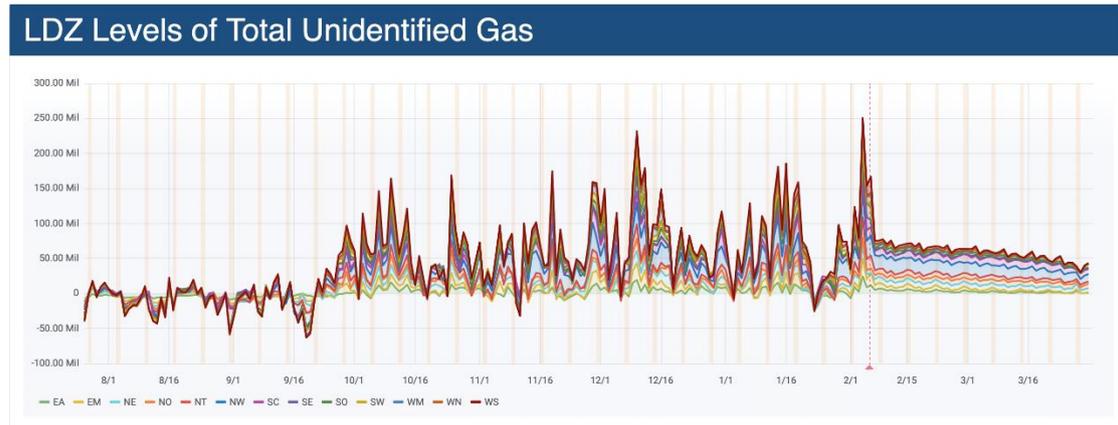
The dashboard currently provides information on the following:

- The latest prevailing view of UIG for the current day
- LDZ detail for the current day
- A history and forecast of UIG across the LDZs
- A detailed table of total UIG nationally and across the LDZs for the current day



The LDZ Levels of Total Unidentified Gas chart displays:

- 1) an history of unidentified gas
- 2) a weather adjusted forecast for the current day and day ahead
- 3) and thereafter a seasonal normal view.



LDZ Levels of Total Unidentified Gas chart: stacked line chart, units are in kWh, banded red shades denote weekends, and dotted red line highlights the current day

Graph functionality includes:

- Date range selection - hover on chart (right click) drag to desired date range to drill down for dates of interest (to return refresh page)
- LDZ selection – click on a single LDZ in legend of chart. For multiple selection, press Shift and select multiple LDZs (to return to show all LDZ reselect any LDZ twice)

A table of Within Day LDZ Detail at a National and LDZ level.

Within Day LDZ Detail					
LDZ ^	TOTAL	NDM	DM	SHRINKAGE	TOTAL UIG
.NATIONAL	2.44 Bil	1.99 Bil	294.31 Mil	6.83 Mil	153.40 Mil
EA	200.93 Mil	169.35 Mil	22.02 Mil	541.03 K	9.02 Mil
EM	260.91 Mil	214.92 Mil	34.00 Mil	570.61 K	11.42 Mil
NE	163.20 Mil	127.39 Mil	28.09 Mil	467.81 K	7.25 Mil
NO	138.56 Mil	105.40 Mil	27.38 Mil	404.14 K	5.39 Mil
NT	243.29 Mil	218.53 Mil	8.21 Mil	571.51 K	15.99 Mil
NW	300.51 Mil	229.70 Mil	43.80 Mil	802.04 K	26.21 Mil
SC	205.12 Mil	164.43 Mil	25.31 Mil	486.71 K	14.89 Mil
SE	259.58 Mil	214.86 Mil	25.27 Mil	771.78 K	18.67 Mil
SO	183.40 Mil	141.10 Mil	21.64 Mil	544.73 K	20.11 Mil
SW	135.22 Mil	122.87 Mil	9.74 Mil	558.08 K	2.05 Mil
WM	210.16 Mil	185.99 Mil	16.39 Mil	710.77 K	7.07 Mil
WN	28.60 Mil	21.69 Mil	5.40 Mil	119.73 K	1.39 Mil
WS	112.70 Mil	71.42 Mil	27.07 Mil	277.81 K	13.93 Mil

Data in the dashboard is derived from industry sources.

- Total LDZ D+5, D+1 actual demand, weather adjusted and seasonal normal forecast, based upon a variety of techniques.
- Total DM D+5 actual demand, aggregated nominations and forecasts.
- The day ahead weather adjusted view is available from 09:30.

Observations

- A seasonal normal forecast of UIG for February averages 85GWh per day;

- Day to day variability affected by calendar events during the Christmas and New Year period;
- Warmer/colder than seasonal normal weather tends towards lower/higher levels of UIG;
- All LDZs have biased and positive levels of UIG which began after the first below seasonal period of weather in the last week of September (pre removal of ALP uplifts);
- Significant day to day variability due to rainfall, with above average amounts of rainfall during October and November. Clear bright days also explain UIG.
- Significant LDZ variability
 - LDZ NW, SC, SW have highest and biased levels of positive UIG and contribute most in volume.
 - LDZ WN, WS contribute less in volume, highest in %.
 - Cross LDZ variability – therefore common factors are contributing to UIG, likely the weather situation.

Dates	Approx. level of UIG	Observations
25/10/2019	160 GWh	Persistent heavy rain, slow moving weather front.
10/12/2019-11/12/2019	160-230 GWh	Days following Storm Atiyah – actual demand higher than estimated, likely CWV too warm giving low levels of NDM demand.
14/01/2020	180 GWh	Much higher than estimated level of gas consumption during Storm Brendan.