

### Pricing and the electrification of process heat

As decisions on the Zero Carbon Bill get closer and Ministers consider the work of the Interim Climate Change Committee, focus is shifting to the emissions reductions that can be achieved in transport and process heat.

There is significant potential to reduce emissions through the electrification of process heat, though less so for heavy industrial processes where the marginal cost of doing so is very high. Generating over 1,000 degrees Celsius with electricity is challenging and uneconomic compared to other forms of energy.

Pricing will ultimately drive electrification. The current wholesale price is so high that it disincentivises industrial electrification. If government wants to drive electrification it needs market settings and behaviours that deliver a lower spot price than the market is currently delivering.

An alternative approach to incentivising electrification is pricing carbon to move industry away from more affordable forms of energy. However, relative to the current wholesale electricity price, the price of carbon would have to be so high that carbon flight results. Industrial businesses would become unviable, with those that can relocating to other countries that don't face high carbon prices and where they can get lower electricity prices.

It is a difficult issue for policy-makers. Ultimately electrification has to be more affordable than it currently is to incentivise larger scale use and thereby substantively reduce industrial process heat emissions. How to achieve lower prices, and sustain them, is not an easy question to answer and a simplistic approach is unlikely to work.

### Real time pricing decision good news

News that Cabinet has signed off on capital funding for introducing real-time pricing (RTP) is welcome news. RTP will make spot prices more accurate and actionable for consumers and suppliers. Consumers particularly will have more certainty they will benefit with use of close to real-time demand side response.

### At the Executive Committee

The MEUG Executive Committee was pleased to host Climate Change Minister and Green Party Co-Leader, Hon James Shaw, in March for an interesting discussion on the Zero Carbon legislation as well as the Minister's thinking on changes later this year to the Emissions Trading Scheme. More broadly, members also discussed wider work on moving towards a low carbon economy and what this might mean for both the electricity sector and for large industrial and commercial businesses generally.

## Key dates

What's on	Who	When	Notes for members
Forum: Security of supply thermal fuel assumptions	System Operator (SO)	1 April	Changes to how Hydro Risk curves have been calculated since last year have been confusing. This forum will discuss recent SO explanatory material. Very timely.
Submission: Gas information disclosure options	Gas Industry Company	17 April	Important topic, e.g. see Pohokura gas field planned outage event and final report by TDB Advisory to MEUG below.
Submission: Real-time-Pricing (RTP) on remaining three design elements	Electricity Authority	30 April	EA workshop on 29 March. Two of the design elements are on details that are important to members, but overall direction good so not as important as 3 <sup>rd</sup> element: design of a "dispatch-lite" option.
Report due: Interim Climate Change Committee (ICCC) to Minister for Climate Change	ICCC	30 April	Two topics being reported back on. Of interest to MEUG are recommendations on planning for the transition to 100% renewable electricity by 2035.
Event timing: Pohokura gas field planned 30-day (part staggered) outage ends	OMV	Late April	Quality and timeliness of information disclosure on gas outages is an issue of concern to gas and electricity sector participants.
Report due: Final report to MEUG on Gas governance Interim report tabled with MEUG submission to Electricity Price Review (EPR) on 22 March	TDB Advisory	End of April	The paper undertakes a high-level assessment of potential key policy and operational issues common to the gas and electricity sectors and the advantages and disadvantages of alternative institutional arrangements for governing the gas sector, including the option of establishing a joint gas and electricity regulator as raised by the EPR.
Meeting: MEUG monthly Executive Committee	MEUG	1 May	Guest visitors to be confirmed.