Like many countries around the world, Hong Kong is considering what fuel mix meets its energy needs and community aspirations. Price, reliability, air quality, autonomy, carbon footprint and much more bear on the complex considerations involved in committing countries, provinces, states and cities to long-term fuel solutions.

The Hong Kong government is consulting public opinion. In May, Mr Canning Fok, Chairman of Power Assets, made his views known.

CHOICES
Members of the public have been presented with two options:

Option 1: Purchase 30 per cent electricity from neighbouring China Southern Power Grid (CSG); or

Option 2: Generate 60 per cent electricity from natural gas in Hong Kong.

At the Power Assets shareholder meeting, Mr Fok presented a case for strongly supporting Option 2. Hong Kong’s biggest concerns — reliability, price and air quality — formed the centrepiece of his logic.

RELIABILITY
The quality of electricity supply in Hong Kong trumps the world with reliability at over 99.999 per cent. Hongkong Electric (HK Electric) customers in particular experience less than one minute of outage each year. At first glance, some may not think that CSG’s 99.96 per cent reliability is that much of a difference, but those few decimal points translate to 3.2 hours a year, or 16 minutes a month! If even a recent eight-minute breakdown of the local metro caused chaos throughout the city, it’s not too difficult for one to imagine how disastrous 16 minutes would be to a city of soaring high-rises and a financial centre. Not only would the banks and stock exchange be affected, lifts, water pumps and even emergency services would be severely crippled. Option 1 would be a big step backwards for Hong Kong.

PRICE
HK Electric customers currently pay about HKD1 per kWh. This compares favourably to HKD1.31 per kWh in Macau, which purchases over 90 per cent of its electricity from CSG, and to other major cities worldwide. If Hong Kong was to connect to CSG’s network, it would require HKD20-30 billion of new infrastructure which translates to HKD0.30 per kWh. Add that to the wholesale price of HKD0.80 per kWh that Macau pays and Hong Kong’s own network costs, buying electricity across the border would undoubtedly be more expensive than local generation.

AIR QUALITY
The electricity supplied to CSG’s Guangdong grid is primarily generated from coal, so more coal will have to be burnt to meet new demand from Hong Kong. While some may think out of sight, out of mind, monsoon winds put paid to that notion. The winter winds regularly blow polluted air south to Hong Kong. Not only would Hong Kong’s cousins to the north suffer from coal burning, the air would eventually blow south to Hong Kong and the rest of the Pearl River Delta. Cleaner burning gas would benefit people in Hong Kong and China alike and help China’s efforts to reduce its overall carbon footprint.

Mr Fok’s strong views come from decades of experience of working in the power sector and a great love of Hong Kong, HK Electric’s headquarters. The call to duty to make his views known has been answered in convincing fashion.

HK LEADS ON PRICE AND STABILITY

<table>
<thead>
<tr>
<th></th>
<th>Hong Kong (HK Electric)</th>
<th>Macau</th>
<th>New York</th>
<th>Sydney</th>
<th>London</th>
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</thead>
<tbody>
<tr>
<td>Average yearly outage (minute)</td>
<td>0.7</td>
<td>2.1*</td>
<td>14.1</td>
<td>$2.30</td>
<td>$2.61</td>
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<tr>
<td>Tariff comparison per kWh (HKD)</td>
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<td>$1.31</td>
<td>$2.04</td>
<td>$2.40</td>
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</tbody>
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*Excluding outage due to stoppage and power supply limits by the Mainland.