

DISTRICT COOLING IN MARINA BAY AREA

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Agenda

1. Background of DCS in Singapore
2. EMA's role in DCS
3. Price Regulation
4. Technical Regulation
5. Regulation of DCS beyond Marina Bay



Background of DCS in Singapore

- The Government in 1998, approved for a pilot District Cooling System (“DCS”) area to be established in the Marina Bay area (“Mandated Zone”). Within the pilot, government agencies would mandate the use of the DCS in order to demonstrate the technology.
- It is compulsory for all non-residential buildings to be constructed within the Mandated Zone to use DCS.



EMA's role in DCS

- In 2001, the District Cooling Act was introduced with its policy intent for EMA to regulate the DCS pilot at the mandated zone due to its nascent technology back then.
- EMA's role is to price-regulate the monopoly DCS operator i.e. Singapore District Cooling Pte Ltd ("SDC"), through a price regulatory framework to safeguard the interests of users in the mandated zone.



Price Regulation

- The objectives of EMA's price regulatory framework are (i) to ensure that the price of chilled water using DCS shall not exceed the price of using conventional methods ("Benchmark Cost") and; (ii) to incentivise the DCS operator to improve efficiency and productivity.
- SDC is required to share half the difference between the Benchmark Cost and Actual Cost ('System Savings') with the mandated users. Sharing of the System Savings incentivises SDC to seek efficiency to lower its actual costs, while allowing its customers to enjoy the efficiencies achieved.



Technical Regulation

- EMA implemented the DCS Supply Code in 2009 to set forth the minimum standards of performance of SDC, rights and obligations of SDC and consumers, as well as the following technical requirements for supply connection.
 - SDC is required to operate and maintain the DCS such that the availability of supply in any calendar year is at least 99.5%.
 - SDC is required to deliver the chilled water within $\pm 0.5^{\circ}\text{C}$ of 6°C .
 - SDC is required to declare to EMA annually that it has complied with the requirements in its Licence or describe any cases of any suspected non-compliance during EMA's compliance declaration exercise.
- Section 13 of the District Cooling Act provides for EMA to impose penalties on SDC for failing to meet these standards.



Regulation of DCS beyond Marina Bay

- Beyond the mandated zone, EMA does not regulate the use of DCS in terms of price or performance standards considering that:
 - i. DCS technology has become more mature and there are already other non-regulated DCS operators in Singapore. Further, the advantages of DCS technology have already been tested, and whether a customer wishes to subscribe to the service could be left to the market forces.
 - ii. There are existing commercial arrangements for DCS in Singapore which demonstrate that a commercial approach to DCS implementation has worked in the absence of government regulation. Market/commercial mechanisms obviates the need to impose unnecessary regulatory burden on businesses, promotes business innovation and accords flexibility for the operator to customise the specific needs of users.
 - iii. Regulation is not without cost, which will invariably be passed through to end users resulting in higher costs.



Thank you.

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