



Our Clean Energy Future

CONSULTATION PAPER

PROPOSED DATA CODE OF PRACTICE (PHASE ONE)

Closing date for submissions of comments and feedback:

31 January 2026

Note: There will be no extension of deadline beyond 31 January 2026, 5 pm

29 December 2025 ENERGY MARKET AUTHORITY

1 Pasir Panjang Road, #23-01, Labrador Tower, Singapore 118479

www.ema.gov.sg

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1 Introduction

- 1.1 The mission of the Energy Market Authority (EMA), referred to as the “Authority” hereafter, is building sustainable, resilient, dynamic, and efficient energy markets and systems. As the energy system becomes more complex—with more assets, interactions, and risks—manual management is no longer feasible. Digitalisation is essential, but to truly unlock its benefits, the industry must improve how it understands, shares, and uses data. This can be facilitated with the development of a Data Code of Practice (hereinafter referred to as the “Data Code”).
- 1.2 The increasing complexity of Singapore's energy landscape necessitates enhanced data sharing across the industry to support informed decision-making, operational efficiency, and system reliability. Effective data sharing enables stakeholders to identify collaboration opportunities, improve service standards, enhance grid management, and respond more effectively to emerging challenges such as renewable energy integration and demand fluctuations. However, without proper governance frameworks, data sharing initiatives may face barriers including inconsistent standards, security concerns, and unclear responsibilities. To address these challenges and unlock the full potential of data-driven energy management, the Authority recognises the need to establish comprehensive data sharing guidelines that provide clarity, ensure security, and promote industry-wide collaboration, via the Data Code.
- 1.3 As a first step towards enhancing data sharing across the energy industry, the Authority proposes to enact the Data Code that apply to and for the compliance of all licensees that hold licences granted by the Authority under section 9(1) of the Electricity Act 2001, section 7(3) of the Gas Act 2001 and section 10 of the District Cooling Act 2001 (hereinafter referred to as the “Licensees”). The proposed Data Code will be implemented in Phases. Phase 1 of the Data Code focuses on Licensees’ management of the data and aims to establish clear responsibilities and obligations for Licensees as recipients of the Authority’s data, ensuring compliance with established standards and procedures for secure, responsible, and efficient data sharing. The proposed Data Code (Phase 1) sets

out the technical, procedural, and confidentiality requirements that Licensees must observe when receiving and handling Authority's data. Future phases of the Data Code will include and incorporate Data Best Practices for the industry.

2 Proposed Data Code (Phase 1)

- 2.1 Pursuant to section 16 of the Electricity Act 2001, section 62 of the Gas Act 2001 and section 14 of the District Cooling Act 2001, the Authority proposes to issue a new Data Code of Practice (the "Data Code"). When it comes into effect, the Code will apply to all Licensees. The Authority would like to invite all Licensees to provide written representations (i.e. comments/feedback) on Data Code (Phase 1).
- 2.2 The proposed Code (Phase 1) pertains to data shared or disclosed by the Authority to Licensees and is intended to enable Licensees to receive data from the Authority through efficient and standardised procedures, thereby minimising administrative demands. At the same time, the proposed Code ensures that robust safeguards are in place to protect the confidentiality and integrity of the Authority's data shared with Licensees. The proposed Code aims to set out mandatory confidentiality obligations and data protection measures, stipulate compliance with standardised procedures and streamlined mechanisms, and ensure secure and efficient sharing of Authority-provided data within the energy sector of Singapore.
- 2.3 The proposed Code will reduce the need for individual Non-Disclosure Agreements (NDAs) for every data-sharing arrangement, thereby minimising administrative burdens and operational inefficiencies for Licensees.
- 2.3 The provisions in the Code will be classified under six broad categories, guided by nine principles (see Table 1). The detailed provisions of the proposed Code (Phase 1) can be found in the draft Code available on Authority's consultation website (<https://www.ema.gov.sg/partnerships/consultations/2026/proposed-data-code-of-practice>).

Table 1 Broad Categories, Principles, and Rationale

S/N	Principle	Rationale for Principle
Category 1: Authorised purposes for use of Data		
1	Use of data as intended	This ensures that data is used for its intended purpose by Licensees. It also prevents unauthorised secondary use of data shared with or disclosed by the Authority to Licensees and helps avoid potential non-compliance or legal infringements.
Category 2: Responsibility and accountability of Licensees		
2	Take responsibility and accountability as data custodian	This sets clear boundaries on what Licensees can and cannot do with the data. These boundaries specify the necessary actions that Licensees need to take and sets the limits of what they can do, ensuring that they understand their responsibilities and obligations, as well as knowing what is permissible, reducing the risk of unauthorised use or mishandling of data. Ultimately, this promotes efficient and secure data management, aligning with the final goal of maintaining data integrity and compliance.
3	Ensure contextual integrity of data	To ensure accurate interpretation and prevent misuse. This consultation mechanism helps avoid misunderstandings about the data's context, methodology, or limitations, ensuring appropriate usage and minimising the risk of erroneous conclusions.
Category 3: Security safeguards and access controls		
4	Ensure data security	Licensees must put in data security and protection safeguards to ensure that shared data is protected from unauthorised access or breaches. This is crucial for maintaining the integrity and confidentiality of the data, and for preventing any misuse or unauthorised disclosure.
5	Apply access control	Access control must be applied to data shared by Authority to ensure that classified information remains secure and is only accessible to authorised personnel. In case of data leaks, this

		can also help Authority identify compromised data and provide appropriate assistance and rectification guidelines.
6	Grant access on a 'need-to-know' basis	The data shared must be kept to a 'need-to-know' basis to establish the principle of minimum necessary access. This limits data exposure to only those personnel with legitimate operational requirements, maintaining visibility over data access points and ensuring that Authority's classified data and/or information remains within appropriate personnel boundaries. This approach reduces security risks while enabling necessary business functions.
Category 4: Data retention and disposal		
7	Keep data relevant	A data retention period helps maintain the relevance of stored data, limits data exposure, prevents the use of outdated information, and reduces licensee liability. Retaining data only for necessary timeframes enables Licensees to avoid permanent data safeguarding. This practice is consistent with common data stewardship principles, minimises security risks, and ensures adherence to regulatory requirements. Regular assessment of data necessity and relevance protects classified information from breaches and/or leaks.
Category 5: Notification of data breach or incident		
8	Report and rectify breaches	Notifying the Authority of any data breach is crucial for facilitating a timely response and ensuring accountability. Prompt disclosure enables effective containment and remediation of data incidents. By informing the Authority, Licensees can reduce potential risks, access guidance and support, and confirm that appropriate corrective actions are taken. Such measures may include filing police reports, issuing joint media statements, and restoring affected systems.
Category 6: Legal and regulatory compliance		

9	Legal and privacy compliance	<p>Compliance with existing legislation such as the Personal Data Protection Act 2012 (PDPA) and the Official Secrets Act 1935 (OSA) is essential for proper data governance. Compliance with the PDPA ensures personal data handling meets statutory requirements, while compliance with the OSA protects government data integrity. Since Licensees access Authority's data, they assume equivalent responsibilities under standard governance procedures. By recognising these regulations, Licensees must understand potential consequences, and implement appropriate measures to prevent data breaches. This ensures classified information remains secure and enables the Authority to continue sharing data confidently, supporting seamless business operations.</p>
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3 Request for Written Representations

- 3.1 The Authority invites written representations (i.e. comments/feedback) on the proposed provisions stated in the proposed Data Code (Phase 1), section 2 (Governance Provisions for data shared by the Authority).

- 3.2 Please submit any written representations via attachments at <https://go.gov.sg/data-code-phase-one-representation-submit> (or scan the QR code in Figure 1 below) by 5 pm on 31 January 2026. The format for submission of comments is shown in Appendix 1. You are requested to include a soft copy of your comments (in both PDF and Microsoft Word format) in your submission.



<https://go.gov.sg/data-code-phase-on-e-representation-submit>

Figure 1 QR Code for submission of written representations

- 3.3 Alternatively, you may submit your written representations by email to EMA_RSU@ema.gov.sg by 5 pm on 31 January 2026.
- 3.4 The Authority will acknowledge receipt of all submitted written representations by email. Please contact Mr Zhong Zhiming at ZHONG_Zhiming@ema.gov.sg if you have not received an acknowledgement of your submission within three business days.
- 3.5 Please note that anonymous submission will not be considered. The Authority reserves the right to make public all, or parts of any written submissions made in response to this Consultation Paper and to disclose the identity of the source. Any part of the submission, which is considered by respondents to be confidential, should be clearly marked and placed as an annex. The Authority will take this into account regarding disclosure of the information submitted.

~ End ~

Appendix 1

Comments/Feedback on Proposed Data Code

Name: _____

Designation: _____

Company: _____

Email: _____

Licence Type (e.g. Electricity Generation/Gas Importer/District Cooling): _____

Licence Number: _____ Submission Date: _____ (dd/mm/yy)

S/N	Section/Paragraph of Proposed Data Code	Comments/Feedback
1		