FRAMEWORK FOR
A REGULATORY SANDBOX FOR THE ENERGY SECTOR
IN SINGAPORE

VERSION 2.0

3 December 2019

ENERGY MARKET AUTHORITY
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FRAMEWORK FOR THE ENHANCED ENERGY REGULATORY SANDBOX IN SINGAPORE

INFORMATION PAPER

1 Executive Summary

1.1 On 23 October 2017, the Energy Market Authority ("EMA") issued a determination paper on the guidelines (the "Framework") for a regulatory sandbox (the "Sandbox") for the energy sector, after incorporating feedback, where appropriate, through an earlier consultation. The determination paper set out the objective and principles of the Sandbox, as well as the application process for interested parties (the "Applicant").

1.2 The Sandbox is intended to allow the industry to test new products and services in a safe and conducive space, while providing the necessary safeguards to protect consumers and the energy market. At the same time, the Sandbox would provide an avenue for EMA to review existing regulations and adjust them as appropriate to support innovation.

1.3 Having launched the Framework for a year, EMA began a review at the end of 2018. As part of the review, EMA considered how the framework can be enhanced to (i) signal EMA’s interest in testing solutions that address system priorities; and (ii) provide holistic support for companies’ energy innovation efforts. EMA has also streamlined the application process to simplify the user journey for Applicants. These are part of EMA’s approach to find innovative solutions that help create a dynamic energy future for Singapore.
2 Introduction

2.1 EMA encourages and welcomes interested parties to provide innovative energy solutions and services that will contribute to a reliable and secure energy supply, effective market competition, and a dynamic and sustainable energy sector in Singapore.

2.2 The energy landscape is fast evolving, with emerging energy technologies and business models that have the potential to reshape economies and industries. A responsive and forward-looking regulatory approach will help promising energy innovations to develop and flourish. In this regard, the establishment of a Sandbox can create an environment where regulations can be relaxed within parameters, to promote innovation in Singapore's energy sector. It also allows the regulator to assess the impact of new products and services before deciding on the appropriate regulatory treatment. The concept of Sandbox has gained momentum in sectors such as the Financial Technology (FinTech) sector. For example, in building a Smart Financial Centre in Singapore, the Monetary Authority of Singapore (MAS) is supporting FinTech experiments so that promising technologies can be tested in the market. While still nascent, there is growing interest in the concept in the energy sector as well. The Office of Gas and Electricity Markets (OFGEM), for example, launched in February 2017 a call for interest in a Sandbox to trial innovative energy business propositions in the United Kingdom (UK), and to allow OFGEM to adapt its regulatory framework to future developments in UK's energy sector.

2.3 The Sandbox has a role to play in EMA's multi-stage approach to find innovative solutions that create our energy future. This approach entails (i) identifying specific technological solutions or business models needed to achieve our intended energy outcomes; (ii) adopting strategies to develop and trial such solutions; and (iii) deploying and scaling up successful solutions. In its aim to develop innovative solutions, EMA has partnered the energy industry on research & development (R&D) grants, test-bed programmes and manpower development initiatives. These ongoing strategies will be complemented by regulatory reliefs and data sharing to further encourage innovation in the energy sector.

2.4 Prior to launching the Sandbox in 2017, EMA reviewed its regulations on a case-by-case basis to accommodate experimentation of new technologies and business solutions. To formalise the approach, EMA implemented a Sandbox to allow the industry to test new products and services in a safe and conducive space. While the Sandbox cannot remove all risks, as failure is an inherent characteristic of innovation, the environment can provide the necessary safeguards to contain the consequences of failure on consumers and the energy market. At the same time, the Sandbox can provide an avenue for EMA to review its regulatory frameworks and to provide appropriate regulatory support.
2.5 Having launched the Sandbox for a year, EMA initiated a review at the end of 2018. During this review, EMA made some observations. One, regulatory sandboxing is part of EMA’s broader efforts to promote innovation, and companies would benefit from a more integrated approach. Two, EMA can do more to signal the system’s priorities to the industry. Hence, as part of this review, EMA considered how the framework can be enhanced to (i) provide holistic support for companies’ energy innovation efforts; and (ii) signal EMA’s interest in testing solutions that address system priorities.

2.6 This revised information paper will cover the following areas: (i) the process for applying, evaluating and conducting the Sandbox; (ii) the criteria for approving projects under the Sandbox; and (iii) the enhancements made to the Sandbox.

3 The Regulatory Sandbox Approach

3.1 EMA would like to encourage more experimentation in the electricity and gas sectors so that promising innovations can be tested in the market and have a chance for wider adoption in Singapore and abroad.

3.2 To achieve this objective, an interested party/parties can apply to adopt a Sandbox to experiment with innovative products and services within a well-defined space and duration. The Sandbox shall include appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the electricity/gas system. EMA may also support the sandboxing of similar products and services that could run concurrently, as long as they meet the objectives and the evaluation criteria as delineated in sections 7 and 8 of this paper respectively.

3.3 The Sandbox would be deployed and operated by the Applicant, with EMA providing the appropriate regulatory support by relaxing specific legal and regulatory requirements prescribed by EMA, which the Applicant would otherwise be subject to, for the duration of the Sandbox. Depending on the proposed product/service, the Applicant involved and the proposal made to EMA, EMA will determine the specific legal and regulatory requirements which it is prepared to relax for each case.

3.4 Upon the completion or expiry of the Sandbox, the Applicant must fully comply with the prevailing and relevant legal and regulatory requirements for its continued operations.

3.5 EMA will (with the exception of R&D funding support) not be providing any funding for proposals selected for the Sandbox (the “Sandbox Project”). There will also not be any charges levied on the Sandbox Project associated with the running of the Sandbox (e.g. application fee/trial fee). EMA however, reserves the right to recover the relevant costs for the operation of the sandbox from the participants.
4 Purpose of this Framework

4.1 The Framework sets out the objective and principles of the Sandbox, and provides guidance to the Applicant on the application process and the information to be furnished to EMA. This Framework also articulates the enhancements made to the Sandbox in 2019.

5 Target Audience

5.1 The Framework will be of particular interest to entities that are looking to leverage on existing or new technology in an innovative way to provide products and services in the electricity and gas sectors, or to improve business and operational procedures. The target participants include, but are not limited to, technology firms, as well as stakeholders and licensees in the electricity and gas sectors.

6 Objective and Principles of the Sandbox

6.1 This section outlines the objective and principles of the Sandbox, and provides the rationale for deploying a Sandbox.

6.2 EMA aims to develop an energy landscape that is forward-looking, dynamic and vibrant. To this end, the Sandbox can help to support innovation and risk-taking that could bring benefits to the market and consumers. The Sandbox would also complement ongoing Energy Research and Development (R&D) initiatives, such as by providing a platform for R&D projects to be tested on a broader scale in Singapore.

6.3 Since its inception in 2017, the application period for the Sandbox has been open all year round (hereinafter referred to as the “Generic Sandbox”). Bottom-up ideas in all areas are welcome, as long as they relate to the electricity and gas sectors under the jurisdiction of EMA.

6.4 All Sandboxes must have a well-defined space and duration for the proposed product/service to be launched, within which the consequences of failure can be contained.

6.5 EMA will determine the specific legal and regulatory requirements which it is prepared to relax for Sandbox Projects, depending on the product and/or service to be experimented.

6.6 Given its purpose, the Sandbox may not be suitable under the following circumstances:
(a) The proposed concept is considered similar to those that are already being offered in Singapore, unless the applicant can articulate the insights to be gained. E.g. through showing that either (i) how a different technology or product/service is being applied, or (ii) how the same technology or product/service is being applied differently;

(b) The proposed concept can already be implemented under the current legal and regulatory framework;

(c) The Applicant has not done its due diligence to test and verify the viability and safety of the product/service, such as testing the technology or product/service in a laboratory environment, and obtaining the necessary technical and safety certifications for the technology or product/service used in the experimentation; or

(d) The Applicant can reasonably and effectively experiment with the product/service in a laboratory or test environment, such as in an ongoing R&D test-bed.

6.7 Notwithstanding the above, proposals that are assessed upfront to have the risk of compromising electricity/gas system security or adversely affect the competitiveness of the electricity/gas market will not be considered.

7 Sandbox Evaluation Criteria

7.1 This section outlines the main evaluation criteria that will be used by EMA in the holistic evaluation and selection of the Sandbox Projects.

7.2 The application should contain the necessary supporting information (Annex A) to depict how the Sandbox evaluation criteria listed below can be fulfilled:

(a) **Genuine innovation:** The submitted proposal should show that the product/service includes new or emerging technologies or products/services, or uses existing technologies or products/services in an innovative way.

(b) **Benefit to consumers and/or the energy sector:** The submitted proposal should show how the product/service can benefit the consumer and/or the gas and electricity sectors.

(c) **Need for Sandbox:** The proposal should show that the project cannot be deployed under current regulatory framework. For projects that require relaxing of regulatory requirements, the proposal should identify the limiting clauses and include alternative safeguards that can be put in place by the Applicant to address potential system, market or consumer concerns.

(d) **Ready for testing:** The proposal should show that the Applicant has secured or intends to secure relevant assets and resources for experimentation and has clearly defined test scenarios and outcomes.
(e) **Defined boundary conditions:** The proposal should be as clearly defined as possible (e.g. by duration of experimentation; customer target segment or estimated customer base), for the Sandbox to be meaningfully executed while sufficiently protecting the interests of consumers and maintaining the safety and soundness of the electricity and gas sectors.

(f) **Defined monitoring and evaluation procedure:** The Applicant should report to EMA on the test progress based on an agreed schedule.

(g) **Risk assessment and mitigation:** Significant risks arising from the proposed technology/product/service should be foreseen, assessed and mitigated. For instance, by providing evidence of preliminary testing, and by identifying risks and proposing mitigating measures for such risks.

(h) **Defined exit and/or transition conditions:** The proposal should clearly define acceptable exit and transition conditions, should the Sandbox Project be discontinued due to certain reasons (e.g. inability to meet objectives of project; safety lapses etc.), be extended (e.g. additional time required to rectify faults), or can proceed to deployment on a larger scale at the end of the Sandbox period. In particular, the conditions should ensure that affected consumers are kept whole in the event that the Sandbox Project is discontinued. Should the Sandbox Project include substantial investment in fixed assets, the Applicant should also specify how these fixed assets would be handled/decommissioned if the Sandbox Project is discontinued.

8 **Thematic Sandbox**

8.1 This section sets out the intent of using themes and challenge/problem statements to scope a Sandbox (hereinafter referred to as the “Thematic Sandbox”). The Thematic Sandbox is an enhancement made to the Sandbox framework in 2019. This section outlines its difference from the Generic Sandbox.

8.2 The energy landscape is fast evolving and Singapore has its distinct set of challenges. From EMA’s perspective, from time to time, there will be top-of-mind concerns due to the system’s emerging needs.

8.3 The incumbent Generic Sandbox allows industry players to submit proposals based on areas they are interested in, all year round. While this welcomes energy innovation in all areas, industry’s applications to the Generic Sandbox may not adequately respond to changing needs of the energy system. Arising from the review in 2018, EMA wants to take a more active approach by encouraging developments in strategic areas that are of greater importance to the Singapore energy landscape.
8.4 Under the Thematic Sandbox, EMA would create scoped themes and/or challenge/problem statements for strategic areas identified by EMA. This would signal EMA’s interest in testing out solutions in specific areas, thus encouraging industry to provide innovative solutions that meet the system’s priority and needs. This would be in the form of challenge statements by EMA (www.ema.gov.sg/Cocreating.aspx) and problem statements in R&D grant calls (www.ema.gov.sg/Industry_Energy_Research_and_Development.aspx).

9 Areas of Support for the Industry

9.1 This section sets out how EMA’s schemes and resources are integrated to holistically support industry players’ innovation efforts. To support the Thematic Sandbox, EMA is also prepared to consider providing funding support (through our R&D grant calls) to Applicants. EMA is also prepared to supply Applicants with energy data that can be used to test and refine their proposed innovations.

9.2 Scoped themes and/or challenge/problem statements for Thematic Sandboxes may dovetail the challenge/problem statements cast by EMA R&D grant calls. Applicants applying through an EMA R&D grant call, may in the same application, indicate if regulatory relief (as part of Thematic Sandbox) is also required. EMA will coordinate internally on the respective evaluation processes for the R&D grant and Thematic Sandbox requests. The Generic Sandbox continues to open all-year round as a catchall for other bottom-up experimentation ideas that fall outside the challenge/problem statements.

9.3 EMA expects digital technologies to play an increasing role in the energy sector, and the development and prototyping of such solutions require data. Where there is merit in the Sandbox proposal, EMA may share market/consumer data with Applicants to support experimentation, subject to conditions including, but not limited to:

9.3.1 Applicants and EMA may be required to enter into appropriate contractual agreement (e.g. Non-Disclosure Agreement) with EMA to safeguard the confidentiality and security of information as part of the Sandbox;

9.3.2 Applicants shall specify the (i) purpose and use of the data, (ii) personnel accessing the data, and (iii) data retention period. Data shared with Applicants shall not compromise system reliability nor entities’ (including both personal’s and company’s) confidentiality and/or privacy. Anonymisation and/or aggregation shall be applied if necessary;

9.3.3 Applicants shall have sufficient data security safeguards in place, and ensure that access to data deemed classified by EMA is limited to authorised persons, as specified in para 9.3.2; All authorised persons shall be security cleared at an appropriate level and sign an undertaking under the Official Secrets Act;

9.3.4 Applicants shall securely destroy all classified data at the end of the project under the witness of appropriately security-cleared EMA officer(s);
9.3.5 EMA will assess and determine the format of data for sharing (e.g. granularity of data; a subset of data; time lag of data);

9.3.6 EMA has the rights to all the data generated by the projected. Applicants shall share all relevant technical/operational data (arising from the project) with EMA;

9.3.7 When handling data assessed by EMA as classified or sensitive, Applicants shall comply with all applicable laws and regulations, and any written instructions on Government policies pertaining to Information Communications Technology (“ICT”) Management, codes of practice or standards of performance that may be issued by EMA from time to time;

9.3.8 Applicants shall allow EMA to conduct periodic audits of the Sandbox to ensure that there are proper controls and compliance. Applicants shall cooperate with and provide all support, information and assistance necessary for the conduct of the audits;

9.3.9 Applicants shall ensure that all its employees, agents and subcontractors comply with all obligations under the Personal Data Protection Act (“PDPA”); and

9.3.10 Applicants shall immediately notify EMA when it becomes aware that it has breached the contractual provisions relating to security, and/or unauthorised access, use and/or disclosure of personal data.

10 Application and Evaluation Stages

10.1 The Applicant should ensure that the proposal fulfils the proposed objectives, principles and evaluation criteria covered in this Framework. As part of the review in 2018, EMA has streamlined the application (the number of entry fields is reduced by almost half) and added a digital option for submission. Applications can be made at go.gov.sg/energysandboxform. Alternatively, applications can be sent to sandbox@ema.gov.sg. The application form is available in Annex A of this information paper. Queries related to the Sandbox can also be sent to this email account.

10.2 The following diagram depicts the application and approval process. EMA will communicate with the Applicant in the course of evaluating the Sandbox application, and will continue to do so during experimentation:
Figure 1: Application and Evaluation

(a) Prior to submitting an application, the Applicant can and should clarify any question regarding the Sandbox by writing in to EMA.

(b) At the “Application Stage”, EMA will review the application and endeavour to inform the Applicant of its potential suitability for a Sandbox within 30 working days after EMA receives a complete set of information necessary for the assessment. The preliminary indication serves to help the Applicant with its business and resource planning.

(c) At the “Evaluation Stage”, the time required to assess the proposal is dependent on its complexity and the specific legal and regulatory requirements involved. External advisory services may be engaged for the evaluation, where necessary. Due to the exploratory nature of the Sandbox approach, the Applicant is allowed to make adjustments to the application for resubmission (for example, refining the boundary conditions) after discussing with EMA. The Applicant would be informed in writing whether to proceed with the Sandbox. Different proposals may have different processes depending on whether they are (i) covered under existing frameworks but do not meet certain rule requirements, or (ii) entirely new technologies/products/services that are not covered under existing regulatory requirements. The processing time for (ii) will take longer, as more time is required to customise the test boundaries and conditions for the Sandbox.
(d) The Applicant will be informed of the reasons if the application is rejected. The reasons for rejection could include failure to meet the objective and principles of the Sandbox, or any of the evaluation criteria. Analysis of the benefits and costs of the Sandbox trial, including economic value and externalities, will be considered. The Applicant may re-apply for the Sandbox when it is ready to meet the objective, principles and evaluation criteria of the Sandbox.

10.3 EMA can allow proposals for new products and services to be experimented within the Sandbox with relaxed regulations. Such regulations include, but are not limited to:

(a) Codes of Practices - Under the Electricity and Gas Acts, EMA has the powers to exempt stakeholders from the relevant provisions in the codes of practices, such as those related to metering codes and codes of conduct.

(b) Electricity Market Rules - EMA may work together with the Energy Market Company Ltd (EMC) – the administrator of the Electricity Market Rules – to modify the existing Electricity Market Rules, if necessary.

(c) Licensing Conditions for Electricity and Gas licensees – Under the Electricity and Gas Acts, EMA may, with the approval of the Minister, provide exceptions from licensing requirements. EMA will continue to look at ways to facilitate the relaxation of such conditions related to the Sandbox.
11 Experimentation/Sandboxing Stage

11.1 Upon approval of the application, the Sandbox will enter the “Experimentation Stage”. The Applicant shall notify its customers, if any, that the product/service is operating in a Sandbox and disclose the key risks associated with the product/service. The Applicant is also required to obtain the customers’ acknowledgement that they have read and understood these risks.

11.2 For the purpose of transparency and provision of information to customers, relevant information of all approved Sandbox applications such as the name of the Applicant, the start and expiry dates of the Sandbox experimentation and a broad description of the Sandbox will be published on EMA’s website.

11.3 EMA is committed to monitoring the progress of every Sandbox trial. All Applicants must submit progress reports to EMA in stipulated intervals. Reports must be presented in a pre-determined format that is clear, quantified and digestible for EMA’s analysis. At the mid-term and end-point of the “Experimentation Stage”, the Sandbox entity and EMA shall have stocktakes to review outcomes derived against pre-agreed indicators. EMA reserves the right to conduct spot-checks, by either EMA officers or authorised third-party personnel.

11.4 EMA reserves the rights to terminate a Sandbox trial at any point of the “Experimentation Stage”, if the Sandbox entity breaches pre-agreed conditions, or if there is no prospect for a successful outcome or regulatory change. Conversely, if the results are very successful at the key milestones, EMA may cut short the trial and adopt the proposed policy.

11.5 In the event that the Applicant intends to make material changes to the product/service under experimentation during the “Experimentation Stage”, the Applicant should apply to EMA at least 1 month in advance and provide details of the changes with reasons (the “change requests”). The Applicant can continue experimenting with the existing product/service while EMA reviews the change requests and informs the Applicant of its decision.

12 Extending/Exiting the Sandbox and Assessing Need for Regulatory Change

12.1 At the end of the Sandbox period, the legal and regulatory requirements relaxed by EMA will expire, and the Applicant must exit from the Sandbox unless otherwise notified by EMA. There is no default/automatic regulatory change, irrespective of the outcome of the Sandbox trial. EMA may deem that. EMA will consult the industry accordingly, before determining whether certain regulations can be permanently amended or relaxed.
12.2 In the event that the Applicant requires an extension of the Sandbox period, the Applicant should apply to EMA as early as possible, with at least 1 month before the expiration of the Sandbox period. Nonetheless, the Applicant is encouraged to consult EMA as early as practicable on the possibility of any extension. The Applicant is to provide reasons to support the application for extension (for example, if additional time is needed to make changes to the product/service under experimentation to rectify flaws, or if the Applicant requires more time in order to fully comply with the relevant legal and regulatory requirements). It should also assume that the deadlines that were earlier committed to, such as those stated in section 8.2 of this document, are upheld unless otherwise notified. EMA will review the application and approval will be granted on a case-by-case basis. EMA’s decision on the application for extension is final.

12.3 Upon exiting, the Applicant can proceed to deploy the product/service under experimentation on a broader scale, provided that:

   (a) both EMA and the Applicant are satisfied that the Sandbox has achieved its intended test outcomes;

   (b) the regulatory treatment for the product/service for broader deployment is determined; and

   (c) the Applicant can fully comply with the relevant legal and regulatory requirements.

12.4 The Sandbox will be discontinued ahead of schedule when:

   (a) EMA is not satisfied that the Sandbox can achieve its intended purpose, based on the latest test scenarios, expected outcomes and/or schedule mutually agreed with the Applicant;

   (b) a substantial flaw has been discovered in the product/service under experimentation, or if there are any severe unintended consequences, where the risks posed to consumers or the electricity/gas system outweigh the benefits of the product/service under experimentation, and the Applicant acknowledges that the flaw cannot be resolved within the duration of the Sandbox;

   (c) EMA terminates the Sandbox due to reasons such as the Applicant breaching any condition imposed for the duration of the Sandbox; or

   (d) the Applicant has informed EMA of its decision to exit the Sandbox at its own discretion.

12.5 The Applicant shall ensure that any existing obligation to its customers of the product/service under experimentation must be fully fulfilled or addressed – i.e. affected consumers are kept whole – and that any fixed assets, if deployed, are properly handled/decommissioned upon exiting or discontinuing the Sandbox. The Applicant shall also ensure that it has not entered into any relevant obligations that would extend beyond the intended expiry of the Sandbox period.
Annex A: Application Template

Applications should be made through the digital form at [https://go.gov.sg/energysandboxform](https://go.gov.sg/energysandboxform). The template below serves as an alternative for applications made via email.

Applicants should familiarise with the objects and criteria of the Regulatory Sandbox at [www.ema.gov.sg/sandbox.aspx](http://www.ema.gov.sg/sandbox.aspx)

<table>
<thead>
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<th>OVERVIEW</th>
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<tbody>
<tr>
<td><strong>1 Name of your company</strong></td>
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<tr>
<td>Pls also indicate country of incorporation and website address</td>
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<tr>
<td><strong>2 Name of Contact Person</strong></td>
</tr>
<tr>
<td>Who we should follow up with</td>
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<tr>
<td><strong>3 Email address of contact person</strong></td>
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<tr>
<td><strong>4 Title and brief description of Sandbox project</strong></td>
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<td>Pls keep within 100 words</td>
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| **5** | **Criterion: Genuine Innovation**  
How does this technology or product work in an innovative way, vis-à-vis alternatives of similar nature? |
| **6** | **Criterion: Benefits to Energy Sector and Consumers**  
What are the benefits? These could cover improvements in security, sustainability, cost efficiency, operational efficiency, or introduction of new market segments. Provide quantifiable estimations where applicable. |
| **7** | **Criterion: Need for Sandbox**  
What regulatory clause(s) need to be relaxed for the deployment of this project? |
| **8** | **What other type of assistance is the Sandbox applicant requesting for, besides regulation reliefs?**  
☐ Regulation reliefs only  
or  
☐ Others: _______ |
<table>
<thead>
<tr>
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<th>Criterion: Ready for Testing</th>
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<tr>
<td>9</td>
<td>What relevant technical and business domain knowledge and experience does the application possess?</td>
</tr>
<tr>
<td>10</td>
<td>What relevant assets and resources are needed for this project, and how will these be secured if they are not already present?</td>
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<tr>
<td>11</td>
<td>What are the test scenarios defined, and the desired targets of this project, that would otherwise be impossible to derive in the market today, or in a simulated environment?</td>
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| 12 | **Criterion: Defined Boundary Conditions**  
What are the defined boundary conditions to protect consumer interest and maintain safety & soundness of the sector, and how will these be monitored & enforced? These include, but are not limited to duration of experimentation, customer target segment; estimated customer base and quantum of sales. |
| 13 | **Criterion: Risk Assessment and Mitigation**  
What is the maximum loss/impact based on foreseeable risks of this project? Pls quantify the risks, which include, but are not limited to breach of test scenarios or boundary conditions, and impact of failure on customers, and electricity or gas ecosystems. |
| 14 | **Criterion: Risk Assessment and Mitigation**  
What are the proposed safeguards to guards against these risks? |
<table>
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<tr>
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<th>Criterion: Defined Monitoring &amp; Evaluation Procedure</th>
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<tr>
<td>15</td>
<td>What is the proposed reporting schedule for EMA to track the progress of this project?</td>
</tr>
<tr>
<td>16</td>
<td>How does the applicant propose for EMA to track the Sandbox’s key risks, progress and success? This could be in the form of data feeds or progress reports. Pls specify data fields.</td>
</tr>
</tbody>
</table>
| 17 | **Criterion: Defined Monitoring & Evaluation Procedure**  
Exit Plan: What is the plan to ensure that consumers are kept whole and engaged, with obligations to them fulfilled, and that assets will be decommissioned appropriately without being stranded? This must consider planned exits at the end of the project duration, as well as unplanned exist due to mandated discontinuation, e.g. due to lapses or unsustainability. |
| 18 | **Criterion: Defined Monitoring & Evaluation Procedure**  
Transition Plan: What are the conditions and requirements for project to potentially extend or expand in scope? E.g. How will consumers be kept whole and engaged, and how will additional resources be secured? |
Thank you for your interest.

Please submit the completed form to sandbox@ema.gov.sg.
Annex B: Determination / Information Papers and Change Log

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Significant Update(s)</th>
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<tbody>
<tr>
<td>1.0</td>
<td>23 October 2017</td>
<td>N.A.</td>
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| 2.0 | 4 October 2019  | • Clause 2.5 describes the review of the framework and observations made from this review.  
|      |                 | • Clause 8 introduces and explains the intent of the Thematic Sandbox concept        |
|      |                 | • Clause 9 describes the various areas of support for the industry, and the conditions for sharing data.  
|      |                 | • Clause 10.1 describes the streamlining and digitalisation of the application process.  
|      |                 | • Clause 11.3 describes how EMA will monitor the progress of every Sandbox trial.    |