



*Smart Energy, Sustainable Future*

**FRAMEWORK FOR A  
REGULATORY SANDBOX FOR THE ENERGY SECTOR  
IN SINGAPORE**

**CONSULTATION PAPER**

29 JUNE 2017

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# FRAMEWORK FOR A REGULATORY SANDBOX FOR THE ENERGY SECTOR IN SINGAPORE

## 1 Introduction

- 1.1 The Energy Market Authority (“EMA”) of Singapore encourages and welcomes firms to provide innovative energy solutions or services to ensure a reliable and secure energy supply, promote effective competition in the market and develop a dynamic energy sector in Singapore.
- 1.2 Against the backdrop of a fast evolving energy landscape, where emerging energy technologies and business models have brought about many opportunities 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 regulatory 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.
- 1.3 The concept of regulatory sandboxes is gaining 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 regulatory 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.
- 1.4 EMA currently reviews its regulations on a case-by-case basis to accommodate experimentation of new technologies and business solutions. To formalise the approach, EMA is considering the implementation of a Regulatory Sandbox (the “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 to firms.
- 1.5 In this consultation paper, EMA seeks views on the Sandbox guidelines (the “Guidelines”), which cover the following areas: (i) the proposed process for applying, evaluating and conducting the Sandbox; (ii) the proposed criteria for approving projects under the Sandbox; and (iii) the proposed changes to existing regulations and rules to address current regulatory barriers to innovation. EMA invites interested parties to submit their views and comments on the proposed guidelines.

## 2 The Regulatory Sandbox Approach

- 2.1 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.
- 2.2 To achieve this objective, an interested firm (the “Applicant”) can apply to adopt a Sandbox to experiment with innovative products and services within a well-defined space and duration. The Sandbox should include appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the power system. EMA will also support the sandboxing of similar products and services, as long as they meet the objectives and the evaluation criteria as delineated in sections 5 and 6 of this paper respectively.
- 2.3 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 solution, 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.
- 2.4 EMA will not be providing any funding for proposals selected for the Sandbox (the “Sandbox Project”). There will also not be any new charges levied on the Sandbox Project (e.g. application fee / trial fee) beyond what is required from the existing system where applicable, e.g. market support service fees and transmission charges. EMA reserves the right to review the relevant charges for successful Applicants on a case-by-case basis.

**Question 1.** EMA seeks comments on **Para 2.3**. Apart from relaxing specific legal and regulatory requirements which the Applicant would otherwise be subject to, EMA seeks suggestions on other possible forms of support which can be provided for the duration of the Sandbox to encourage more experimentation in the electricity and gas sectors.

## 3 Purpose of the Guidelines

- 3.1 The Guidelines set out the objective and principles of the Sandbox, and provide guidance to the Applicant on the application process and the information to be furnished to EMA.

## 4 Target Audience

- 4.1 The Guidelines will be of particular interest to firms 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.

## 5 Objective and Principles of the Sandbox

- 5.1 This section outlines the objective and principles of the Sandbox, and provides the rationale for deploying a Sandbox.
- 5.2 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. EMA will provide the requisite regulatory support, so as to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore.
- 5.3 The scope of the Sandbox will be on products and services related to the electricity and gas sectors under the jurisdiction of EMA.
- 5.4 The Sandbox 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.
- 5.5 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.
- 5.6 Given its purpose, the Sandbox may not be suitable under the following circumstances:
  - (a) The solution is considered to be similar to those that are already being offered in Singapore (i.e. no element of innovation or experimentation);
  - (b) The Applicant has not done its due diligence to test and verify the viability and safety of the solution, such as testing the solution in a laboratory environment, and obtaining the necessary technical and safety certifications for the product or technology used in the experimentation; or
  - (c) The Applicant can reasonably and effectively experiment with the solution in a laboratory or test environment, such as in an ongoing R&D test-bed.
- 5.7 Notwithstanding the above, proposals that are assessed upfront to have the risk of compromising system security or adversely affect the competitiveness of the market will not be considered.

**Question 2.** EMA seeks comments on the proposed circumstances where the Sandbox may not be suitable (**Para. 5.6**).

## 6 Sandbox Evaluation Criteria

- 6.1 This section outlines the main evaluation criteria which will be used by EMA in the holistic evaluation and selection of the Sandbox Projects.
- 6.2 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 the innovative aspect of the product / service by demonstrating that it is new in the market **or applied differently from existing practices.**
  - (b) **Benefit to consumers and/or the power 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 / 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 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.), 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.

**Question 3.** EMA seeks comments on the proposed evaluation criteria to assess the proposal's suitability for a Sandbox.

## 7 Extending or Exiting the Sandbox

- 7.1 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.
- 7.2 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 6.2 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.
- 7.3 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.

**Question 4.** EMA seeks comments on the process of extending and exiting the Sandbox.

7.4 The Sandbox will be discontinued when:

- (a) EMA is not satisfied that the Sandbox has achieved its intended purpose, based on the latest test scenarios, expected outcomes and 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 power 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.

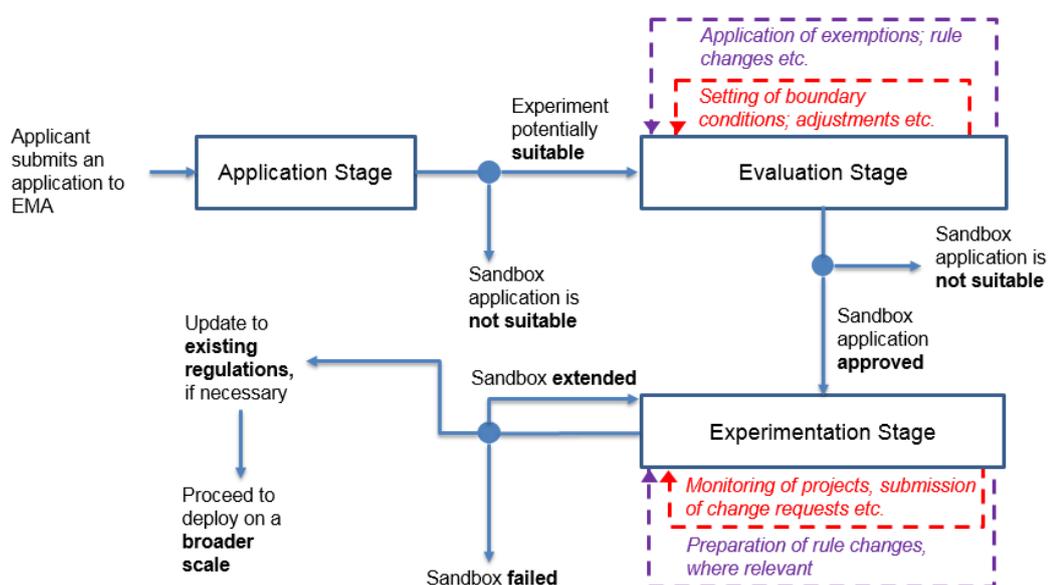
7.5 The Applicant should ensure that any existing obligation to its customers of the product / service under experimentation must be fully fulfilled or addressed – i.e. affected consumers are kept whole – and that any fixed assets, if deployed, should be properly handled/decommissioned before exiting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

**Question 5.** EMA seeks comments on the proposed circumstances where the solution will be discontinued (**Para. 7.4**).

## 8 Application and Approval Process

- 8.1 The Applicant should ensure that the proposal fulfils the proposed objectives, principles and criteria as given at sections 5 and 6 before submitting the application form, which is attached as **Annex A** of this consultation paper. Applications for Sandbox Projects should be sent to EMA. Queries related to the Sandbox can also be sent to this account.
- 8.2 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 approval process**



- (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 shall 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. 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.

- (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. The Applicant may re-apply for the Sandbox when it is ready to meet the objective, principles and evaluation criteria of the Sandbox.
- (e) Upon approval of the application, the Sandbox will enter the “Experimentation Stage”, and Section 7 of this document shall apply. 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 service. The Applicant is also required to obtain the customers’ acknowledgement that they have read and understood these risks.
- (f) 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 solution while EMA reviews the change requests and informs the Applicant of its decision.
- (g) 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.

8.3 The 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 or 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.

**Question 6.** EMA seeks comments on the Sandbox application and approval process, as well as the timeline, as described in section 8.

- 8.4 To illustrate the application and approval process, **Annex B** provides a case study on how a proposal that meets EMA's expectations is processed, which will allow for a Sandbox to be implemented.

## 9 Regulatory Changes

- 9.1 EMA aims to allow proposals for new products and services to be experimented within the Sandbox. Regulations that may require amendments 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 - To expand EMA's ability to provide exemptions for Sandbox Projects, EMA may consider working together with the Energy Market Company Ltd (EMC) – the administrator of the Electricity Market Rules – to modify the existing Electricity Market Rules.
  - (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 is currently looking at how to further streamline related processes to allow faster review of exemptions related to the Sandbox.

**Question 7.** EMA seeks views on whether the provisions under the codes of practices are sufficient for EMA to provide exemptions, as well as the possible regulatory changes required to expand EMA's ability to provide temporary exemptions for Sandbox Projects.

## 10 Summary of Feedback Sought

- 10.1 This paper has raised a number of questions that EMA seeks feedback and comments on. These questions are summarised below for ease of reference.

**Q1** Apart from relaxing specific legal and regulatory requirements, what are other possible forms of support that can be provided for the duration of the Sandbox to encourage more experimentations in the electricity and gas sectors?

**Q2** Are there any other circumstances or scenarios where the Sandbox may not be suitable? Is the current criteria too restrictive?

**Q3** Is the proposed evaluation criteria comprehensive to assess the proposal's suitability for a Sandbox?

- Q4 Is the process for extending and exiting the sandbox comprehensive and robust?**
- Q5 Are there any other circumstances that might require the solution to be discontinued? Is the current criteria too restrictive?**
- Q6 Is the proposed application and approval process comprehensive and robust?**
- Q7 What are some of the possible changes to be made to current regulations that would expand EMA’s ability to provide temporary exemptions to facilitate Sandbox Projects?**

10.2 Additional feedback and comments beyond what is covered by the questions in para 10.1, but are deemed to be relevant for EMA’s consideration in our review of the framework for a regulatory sandbox for the energy sector, are welcomed.

## 11 Next Steps

- 11.1 The EMA wishes to seek the views of the public and the industry on the questions listed in section 10 of this consultation paper.
- 11.2 The indicative timeline of the EMA’s consultation process for the framework for the Regulatory Sandbox is summarised in **Table 1.**

**Table 1: Indicative timeline of the consultation process**

	<b>Process</b>	<b>Date</b>
1	Issue of the EMA’s Consultation Paper	29 Jun 2017
2	Feedback from stakeholders on the Consultation Paper due	27 Jul 2017

## REQUEST FOR COMMENTS AND FEEDBACK

The EMA invites comments and feedback to the questions delineated in sections 2 to 9 of this consultation paper.

All inputs should reach EMA by **27 Jul 2017**. Electronic submission of views and comments is encouraged. Please email to [ema\\_corp\\_planning@ema.gov.sg](mailto:ema_corp_planning@ema.gov.sg). Alternatively, you may wish to submit your views and comments by post/fax to:

Attn: Mr Andrew Seah  
Policy & Planning Department  
Energy Market Authority  
991G Alexandra Road, #02-29  
Singapore 119975  
Fax: (65) 6835 8020

Anonymous submissions will not be considered.

The EMA will acknowledge receipt of all submissions electronically. Please contact Mr Andrew Seah at 63767874, Ms Cheong Cui Wen at 63767868 or Ms Phua Zhi Ling at 63767869 if you have not received an acknowledgement of your submission within two business days.

The EMA can facilitate meetings with stakeholders on an individual basis to discuss their feedback to this consultation paper. Please contact EMA via [ema\\_corp\\_planning@ema.gov.sg](mailto:ema_corp_planning@ema.gov.sg) if you wish to arrange a meeting.

The EMA 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 which the EMA will take into account regarding the disclosure of the information submitted.

**APPLICATION TEMPLATE FOR REGULATORY SANDBOX FOR THE ENERGY SECTOR IN SINGAPORE**

## 1. Applicant's Information

*[Note: For applications involving more than 1 entity, please include the details of the lead entity and all involved entities.]*

<b>Organisation</b>	
<b>Address</b>	
<b>Telephone</b>	
<b>Country of Incorporation</b>	

<b>Name of Authorised Representative</b>	
<b>Designation</b>	
<b>Email</b>	
<b>Telephone</b>	
<b>Signature</b>	
<b>Date</b>	

## 2. Overview

S/N	Description	Response
1	Provide a brief description of the organisation and its core businesses.	
2	Provide a brief description of the solution contemplated in the proposal.	
3	Does the Applicant currently have the relevant licence(s) to deploy the solution in the energy sector? Please provide the details.	
4	Does the Applicant require EMA to relax any specific legal and regulatory requirements prescribed by EMA, for the duration of the Sandbox? Please provide the details.	

3. Details of the proposal to support the Sandbox evaluation criteria

Criteria	Requirements	Supporting Information or Attachments
Para 6.2a and 6.2b	Details of the product and/or solution, including a comparison of the key features against similar or competing technologies.	
	Details of the innovative ways the technology is utilised in the proposed solution, including a comparison with existing or alternative products, services or processes of similar nature.	
	Benefits of the proposed solution, such as improvements in security, cost efficiency, operational efficiency, or new market segment. Provide quantifiable estimations where applicable.	
Para 6.2c	Assessment on the suitability and readiness of the proposed solution for the Singapore market, including comparisons against similar markets globally.	
	Details of the business strategy and plan, including the roadmap to deploy the proposed solution in Singapore on a broader scale.	
	Financial standing of the Applicant, including any capital raised.	

	Relevant technical and business domain knowledge and experience of the Applicant.	
Para 6.2d, 6.2e and 6.2f	Test scenarios aimed at removing the uncertainty which could be arising from regulatory, technology or business, and could not be reasonably or effectively simulated in a test environment.	
	Appropriate targets which allow EMA and the Applicant to assess whether the test outcomes have been achieved.	
	Boundary conditions for the Sandbox, such as: <ul style="list-style-type: none"> <li>• Start and end date of the Sandbox, and the justification for the duration;</li> <li>• Target customer type;</li> <li>• Limit on the number of customers involved; or</li> <li>• Quantum of electricity sales.</li> </ul>	
	Processes and controls to ensure that the boundary conditions are not breached.	
	Monitoring and evaluation procedure, including a proposed reporting schedule, to report on test progress.	
Para 6.2g and 6.2h	Quantification of the maximum loss and impact that the proposal could potentially create, including any potential knock-on effects.	

	Channels for handling customer or public queries, feedback or complaints.	
	Monitoring plan to ensure the prompt notification of any breach to EMA, for example breach of the Sandbox test scenarios, boundary conditions or safeguards.	
	Risk mitigation plan to minimise the impact of failure on customers and electricity and/or gas ecosystems.	
	<p>Exit and transition plan for customers, in the event that the proposed solution has to be discontinued, or can proceed to be deployed on a broader scale after exiting from the Sandbox.</p> <p>The Exit and transition plan is to include steps to 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 and/or decommissioned before exiting or discontinuing the Sandbox.</p>	
	Communications plan to inform customers and members of the public (if applicable), including:	

	<ul style="list-style-type: none"><li>• the duration, boundary conditions and associated risk disclosure for participating in the Sandbox;</li><li>• advance notification of the termination or extension of the Sandbox, or when the proposed solution can proceed to be deployed on a broader scale.</li></ul>	
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**AN EXAMPLE OF A SANDBOX APPLICATION****Scenario**

- A firm has developed an innovative proposed solution, using a combination of existing and new technology, for an activity regulated by EMA.
- Based on its research, the solution is able to address an existing gap in the electricity sector, and the firm intends to deploy the solution in Singapore.
- The firm has performed rigorous due diligence on the solution, such as by obtaining the necessary internationally-recognised technical and safety certifications for the product.
- However, the firm is uncertain if all major foreseeable risk scenarios have been effectively addressed given that there was no precedent to guide the testing.
- In addition, the firm is still at the early growth stage, and is unable to fully comply with existing legal and regulatory requirements. It is looking for certain exemptions to be granted by EMA.

**Existing Approach**

- The firm submits a licence application to EMA and indicates the specific exemptions required.
- Given the novelty of the solution and that the firm does not have a track record comparable with established energy companies, EMA is likely to take a longer time to understand and clarify the potential risks.
- Meanwhile, the waiting time adds on to the uncertainty of the situation.
- With the existing approach, the scenario could potentially develop into the situations whereby promising innovations were being stifled and the doors to potential opportunities were being closed.

**Sandbox Approach**

- The firm learns that EMA encourages energy innovations through the adoption of a Sandbox, and prepares the proposal in accordance to the Guidelines.

- As the firm does not have a contact point with any EMA Review Officer, it submits the proposal and supporting information to EMA
- EMA receives the proposal and assesses it against the Sandbox evaluation criteria, including the specific legal and regulatory requirements to be relaxed for the duration of the Sandbox.
- To facilitate the firm with its business and resource planning, EMA will inform the Applicant on whether the proposal is potentially suitable for a Sandbox within 30 working days.
- EMA continues with the evaluation and clarification process with the firm. Assuming that EMA is satisfied with the proposal, the firm would be informed in writing to proceed with the Sandbox.

Evaluation Criteria	Assessment (illustrative and non-exhaustive)
Is the proposed solution technologically innovative?	Yes, the proposed solution is the first-of-its-kind in Singapore in the region. The deployment of the solution would support Singapore's climate change commitments given that it helps to better manage carbon emissions, and better utilize land-resources given its small footprint as compared to similar products in the market.
Does the proposed solution address an issue or bring benefits to consumers and/or the power sector?	
Is the solution covered under the current regulatory framework?	Currently, the deployment of the solution is not allowed as it does not fall within the regulatory framework, but could be tested under the Sandbox framework to see whether doing so may be more cost-efficient. The Sandbox could also allow EMA to assess if there is a need to adapt our policies to accommodate the deployment of such technologies when they become commercially viable.
Has the Applicant secured the relevant assets for experimentation, and have the Sandbox test outcomes been clearly defined?	The necessary technical and safety certifications have been obtained from internationally-recognised certification bodies.

Are the boundary conditions clearly defined?	Technical experts were also involved from the conceptualization phase to provide safety advice to this initiative.
Have the major foreseeable risks been assessed and mitigated?	
Is there a defined monitoring and evaluation procedure?	The Applicant has included a monitoring and evaluation plan in its proposal.
Has the exit strategy been defined in the event that the solution is discontinued?	The Applicant has included decommissioning and removal plans in its proposal.