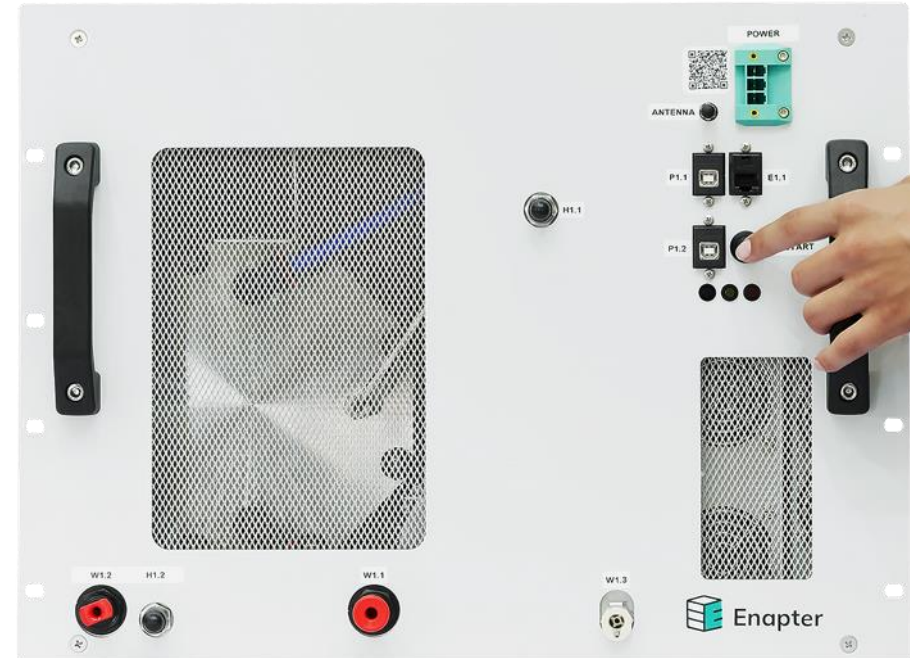




Enapter

Enapter Technology Roadmap

Q4 2021



Enapter Technology Roadmap

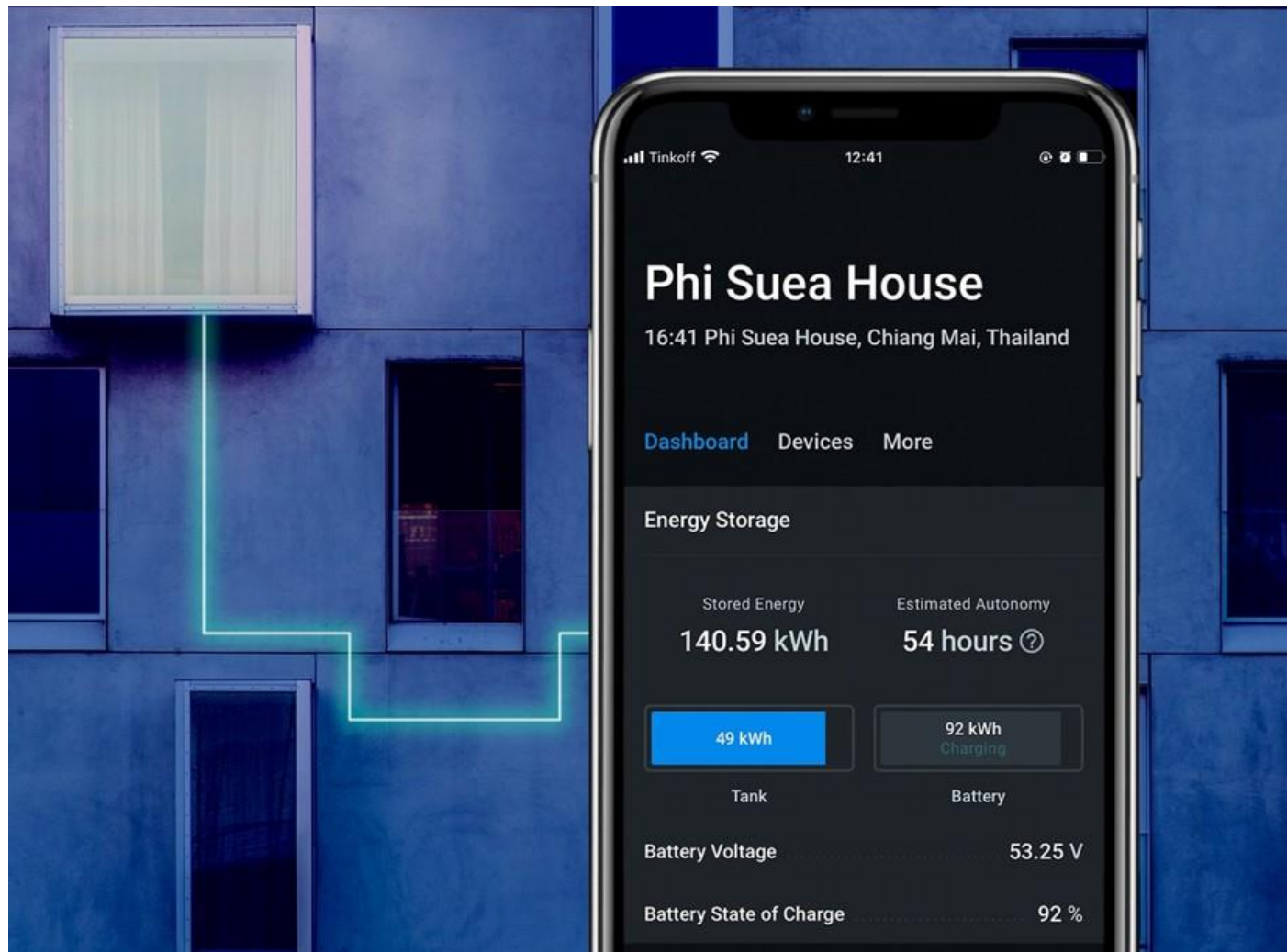
4th Quarter, 2021

- ≡ Our quarterly updates on Enapter's products and technology developments provide visibility on product releases / updates as well as new software features that our teams are working on. As valued customers and partners, we hope that these updates will allow you to account for our upcoming developments with regard to your projects.
- ≡ We have released FW 1.9.0 which has been rolled out and is available for self-update with Enapter mobile application. On the hardware side we continue the development of the EL 4.0, the next generation of the flagship Enapter electrolyser module. Furthermore, we are in the detailed design phase of the AEM Multicore.
- ≡ We have released a new version of the Enapter Handbook, which makes it well-arranged and easier to find. Please take a look [here](#).
- ≡ The 4th Partner training is scheduled for the first week of February. If you would like to join this training and have not yet received an invitation, please do reach out to us.
- ≡ Previous technology roadmap can be found in the Handbook [here](#).



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Software



Software Updates (1/2)

What	New features	When
<p>Electrolyser FW Version 1.9.0 The new firmware version has been rolled out and is available for self-update via the Enapter mobile application</p>	<ul style="list-style-type: none">≡ Preheat command for electrolyte preheating available in ModBus (#1014), EL 2.1 Web GUI and Enapter Cloud≡ Elevation can be set over ModBus or WebGUI to compensate zero pressure of stack and outlet pressures≡ Electrolyser settings backup and restore feature available in the Enapter Cloud≡ Dryer Firmware Update now available over Electrolyser Web GUI when IDCN is used. Dryer needs to be updated to version 3.5.0 over OTA.≡ Improved PID regulation of electrolyte cooling fan to avoid overcooling and prevention to reach 55°C≡ A long press of the button in Stand-by enables system restart even if the outlet pressure is over the restart pressure setpoint	<p>December</p>

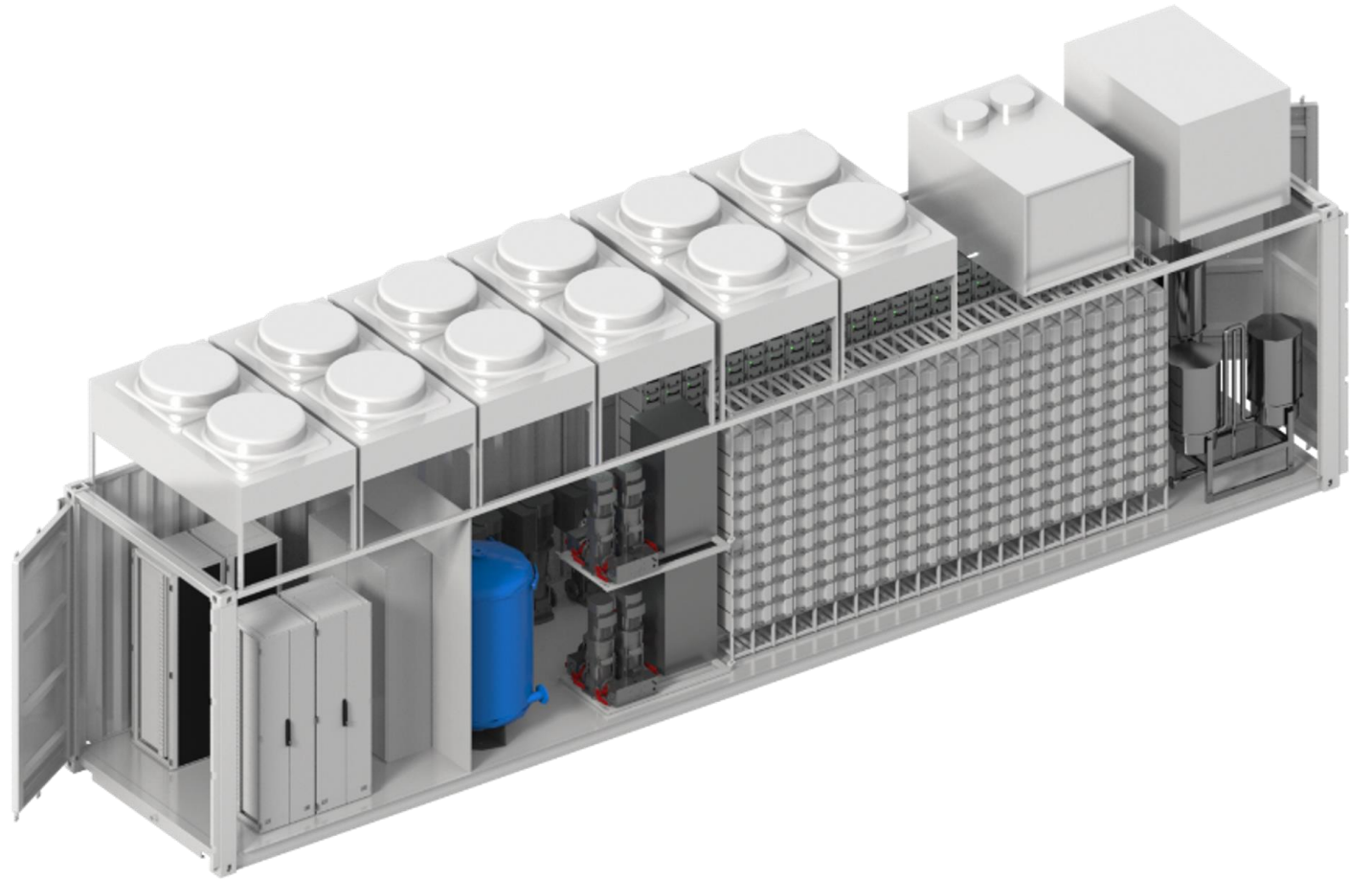
Software Updates (2/2)

What	New features	When
<p data-bbox="155 337 624 372">Enapter Blueprints Marketplace</p>	<p data-bbox="784 337 2102 462">≡ Meet the Enapter Blueprints Marketplace in GitHub, where developed blueprints for Hardware and Virtual UCMs can be found, as well as developed blueprints can be uploaded. A link can be found here: https://github.com/Enapter/marketplace</p> <p data-bbox="843 515 2023 641">You can find 25+ different ready to use 3rd party device integrations which were developed with support of of integrators around the world. Different Fuel Cells, Inverters, Batteries, Power Meters and many more!</p>	<p data-bbox="2130 337 2295 372">December</p>
<p data-bbox="155 762 690 798">Enapter Diagnostics App for Android</p>  <p>The screenshot shows the Enapter Diagnostics App interface on an Android device. At the top, it indicates 'You are connected to 5 GHz Wi-Fi'. Below this, there is a yellow warning box with text: 'Please enable Wi-Fi connection and ensure that it supports 2.4 GHz connection. In case if you experience a connection problem with Enapter Devices it is recommended to create a separate Wi-Fi network with only 2.4 GHz band support.' The network details section shows: 'Wi-Fi Network: 5 GHz', 'IP Address: 192.168.123.144', 'Mac Address: F8C39E9170C9', and 'DNS Servers: [192.168.123.1]'. A 'DNS error' message is displayed: 'Name resolution of hostnames doesn't work. Check your DNS.' At the bottom, there is a list of hostnames with a checkmark and the domain 'cloud.enapter.com'.</p>	<p data-bbox="784 762 2102 933">≡ Meet free Enapter Diagnostics App for Android! We understand how it might be difficult to understand communication issues in 2.4 GHz Wi-Fi environments. This app can check your connection and guide you through recommendations on how to make it even better for Enapter IoT devices.</p>	<p data-bbox="2130 762 2295 798">December</p>



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Hardware



Hardware updates

What	What is new?	When
<p>Electrolyser EL 4.0</p> <p>The next generation of our flagship electrolyser module, providing the familiar modularity of 0.5 Nm³/h production rate, now designed according to ISO 22734 and reduced size and weight</p>	<ul style="list-style-type: none">≡ The electrolyser weight will be strongly reduced in weight from 55 to around 38 kgs. This will be achieved by switching from a steel to an aluminium chassis≡ We will release an DC/DC version of the electrolyser 4.0≡ We will work on UL certification aimed for the North American market	<p>Development progresses continuously, we will update you soon on the further development and availability</p>
<p>AEM Multicore</p> <p>The AEM Multicore is a megawatt electrolyser featuring 420 AEM stack modules and a common, yet redundant, balance of plant.</p>	<ul style="list-style-type: none">≡ We are in the detailed design phase; thus we will build and assemble the first Multicore prototype in 2022. This will be placed in the Bioenergiepark in Saerbeck.≡ Inside the Multicore, the drying units will be offered as optional.≡ We are also able to offer the Multicore as a half Megawatt solution.≡ We have slightly adjusted the pricing of the Multicore, please reach out to us if you would like to get a budgetary quotation.	<p>The Multicore is available for pre-order and the first containers will be deliverable from summer 2023 onwards</p>



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