

Equipment Eligibility Criteria

Configuration Options and Component Descriptions for a HBS-compliant battery system

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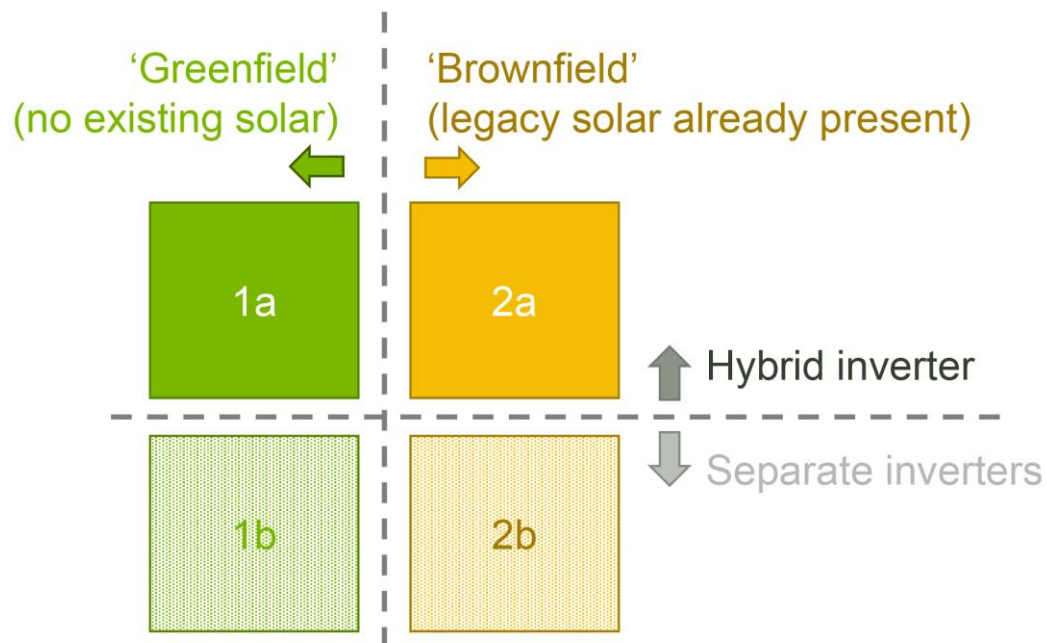
Government of South Australia
Department for Energy and Mining

Configuration options

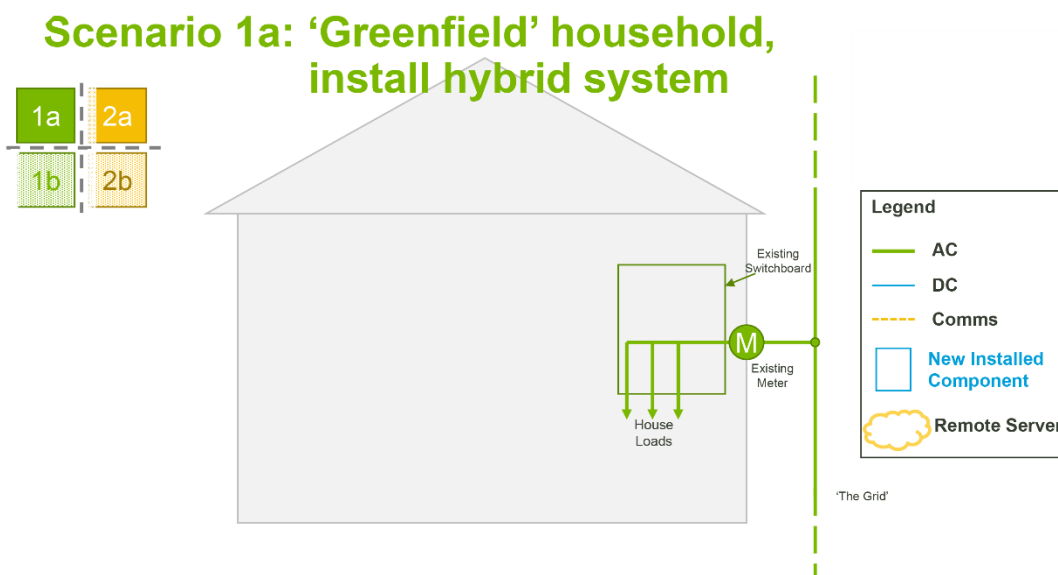
- HBS-compliant battery systems **could take a number of configurations**, provided the installed system meets the requirements under the scheme.
- The 'battery system', for the purpose of the scheme, is **the collection of components that has been pre-approved for each Provider and achieves the HBS requirements**, and will likely include a number of discrete components, among them:
 - battery module(s)
 - battery inverter
 - hybrid inverter
 - current sensor
 - smart controller / meter
- In many cases, products are available that combine the discrete components in this list. The intent of the scheme is to **avoid prescribing combinations or configurations, but rather**
 - i) set **functional requirements** that must be met by the installed system, and
 - ii) invite **accredited providers to propose combinations/configurations** of specific products for approval under the scheme.
- This document explores a **range of potential configurations** and most likely component types that would be installed to meet the system requirements. It is not intended to be exhaustive.
- Generally, four over-arching configurations are likely, depending on the answers to two questions:
 - Is a solar system **already installed** at the household? (greenfield vs brownfield)
 - and
 - **Is a single hybrid inverter used**, or are separate solar and battery inverters used?

Configuration options (cont.)

Four high-level configurations are likely:

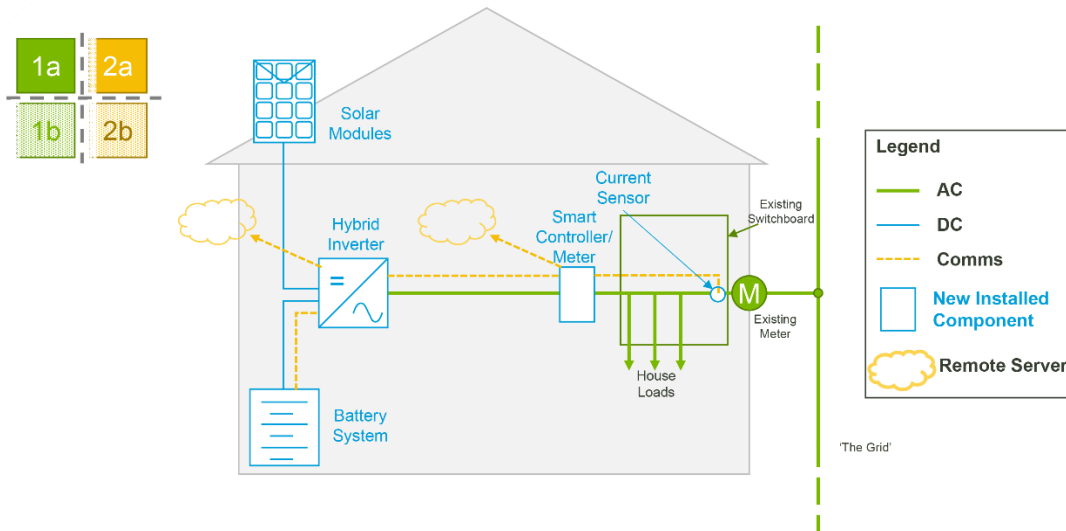


The document steps through the four scenarios describing these configurations.



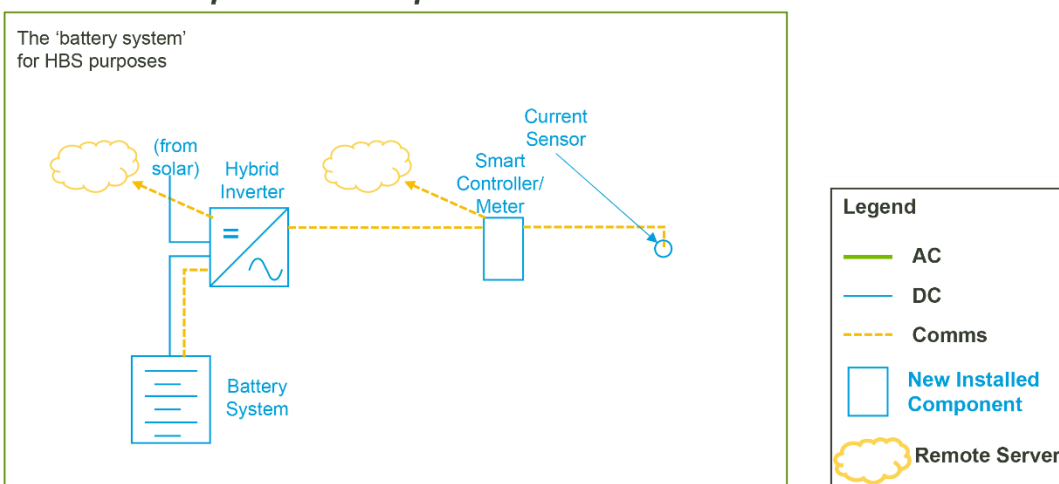
- Pre-install state of the property is shown – no solar is present on the property.

Example configuration only - many variations possible

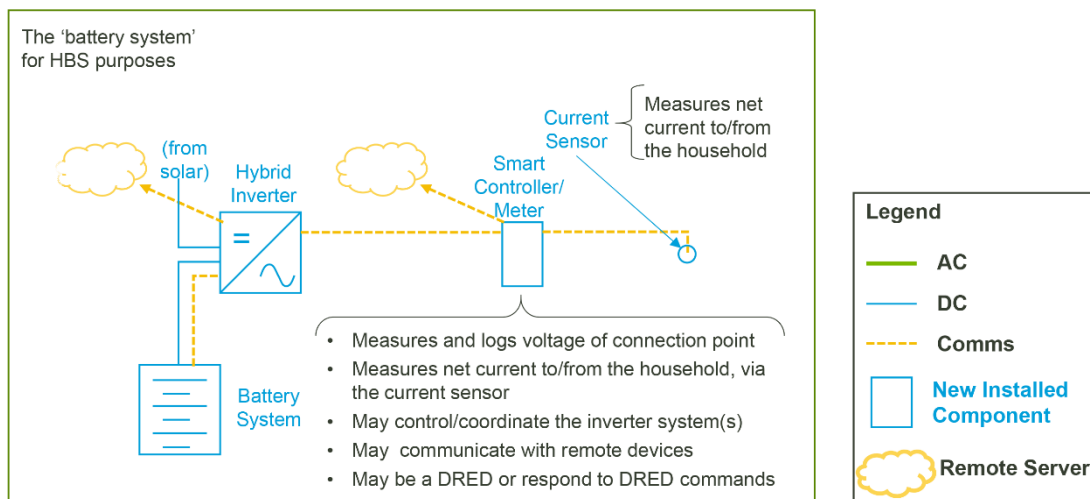
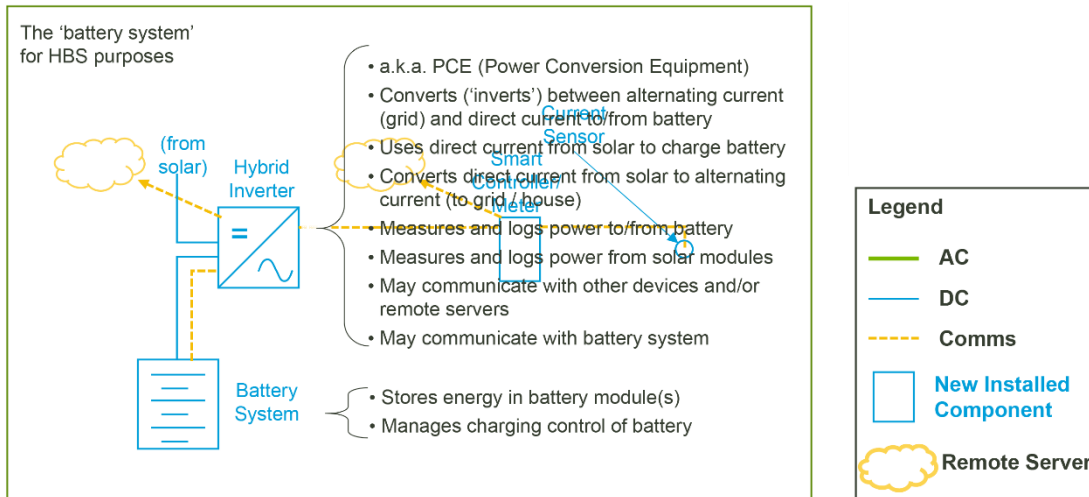


- Assume a 'greenfield' installation is more likely to include solar than not, and in this scenario uses a hybrid inverter
- Major components typically expected to be installed are shown in blue
- Solar modules are not part of the "battery system" for HBS purposes, but would be concurrently installed as part of the installation

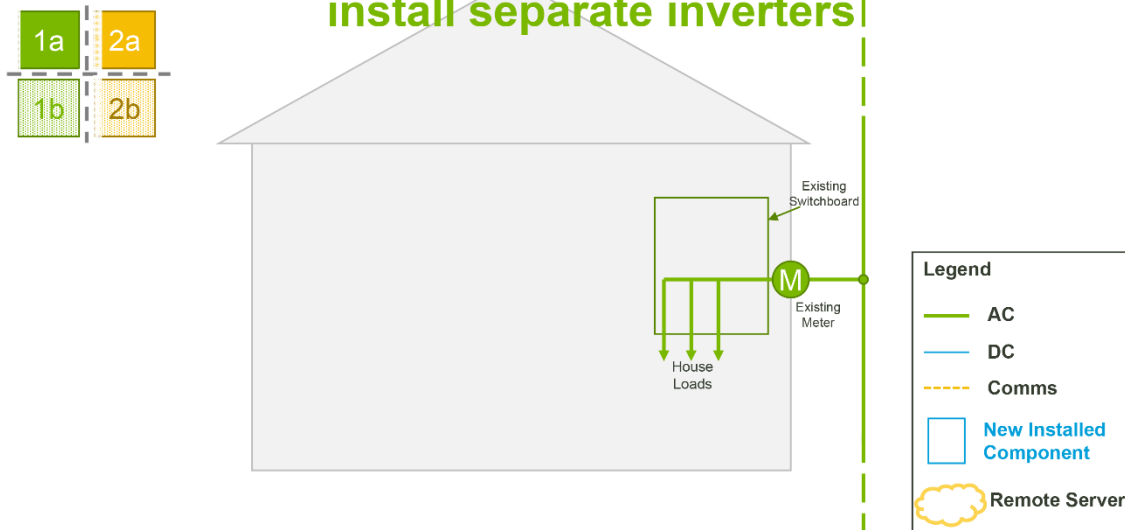
Sidebar: Component descriptions



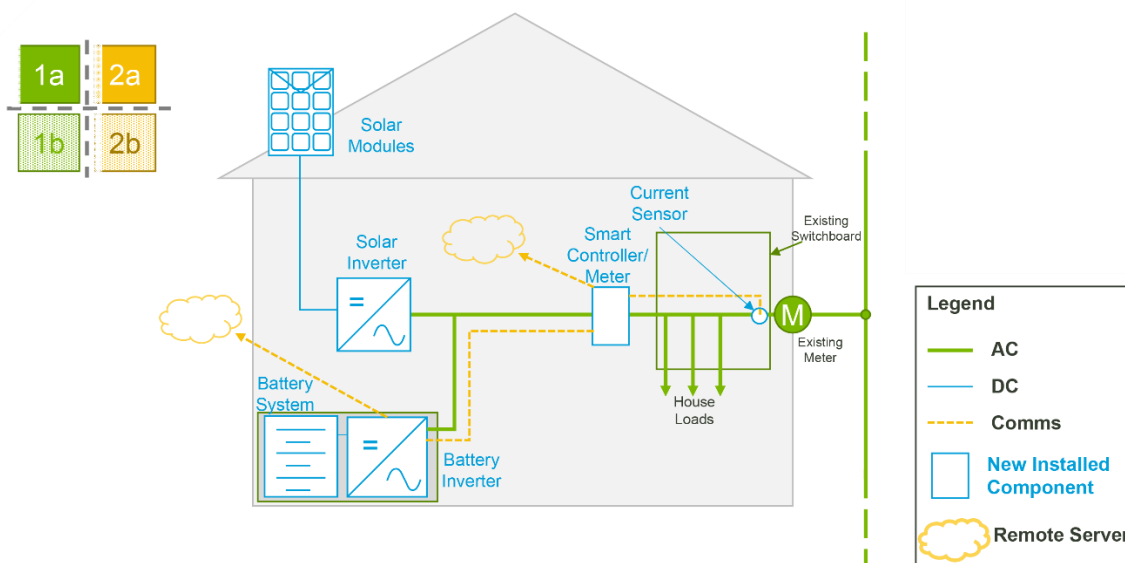
Sidebar: Component descriptions



Scenario 1b: 'Greenfield' household, install separate inverters

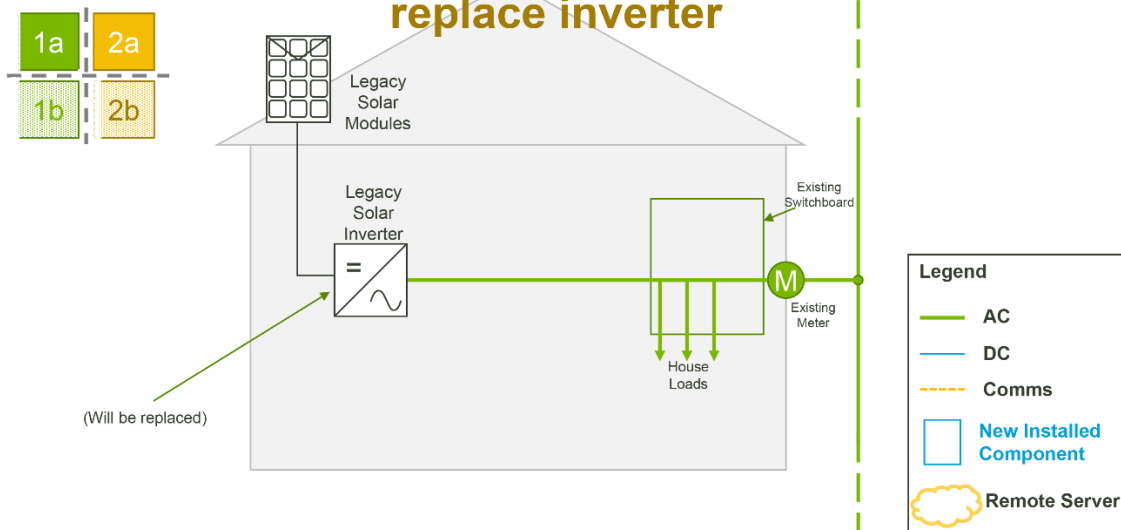


- Pre-install state of the property is shown – no solar is present on the property

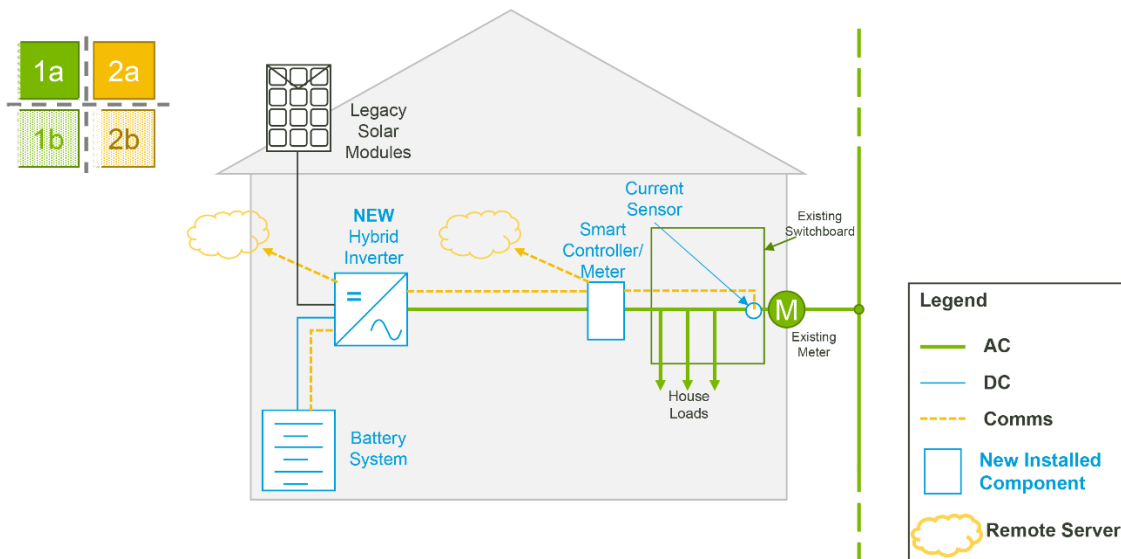


- System installed includes new solar modules, connected to a new standalone solar inverter
- A separate AC-coupled battery inverter and battery system are also installed
- This configuration is expected to be likely in cases where the battery product is a self-contained integrated product combining inverter and battery modules (shown via shading)
- Battery inverter and battery system may instead be separate products

Scenario 2a: 'Legacy solar' household, replace inverter

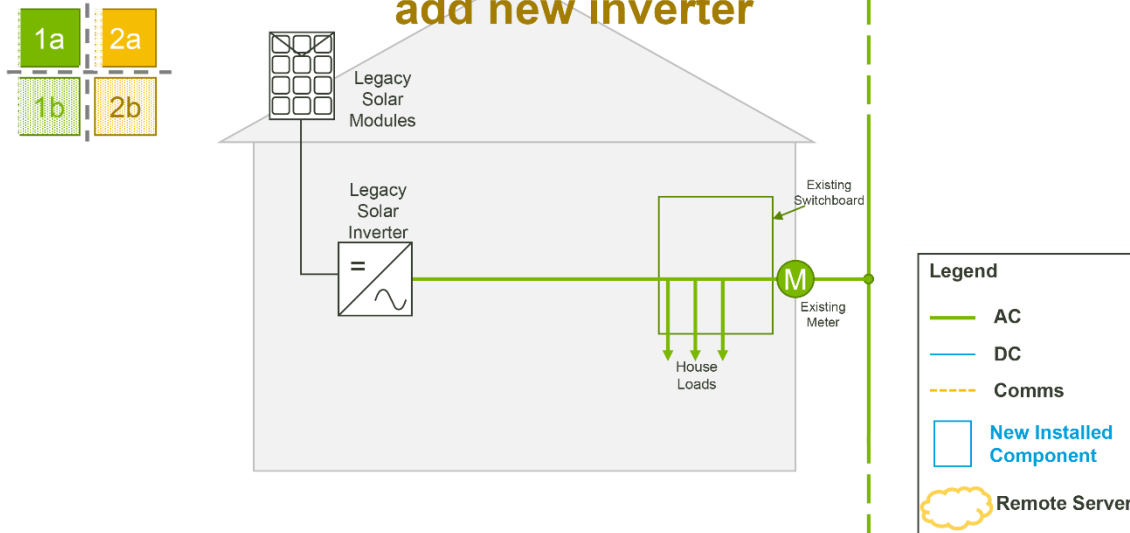


- Pre-install state of the property is shown – legacy solar modules and legacy solar inverter are present on the property
- Legacy solar inverter will be replaced

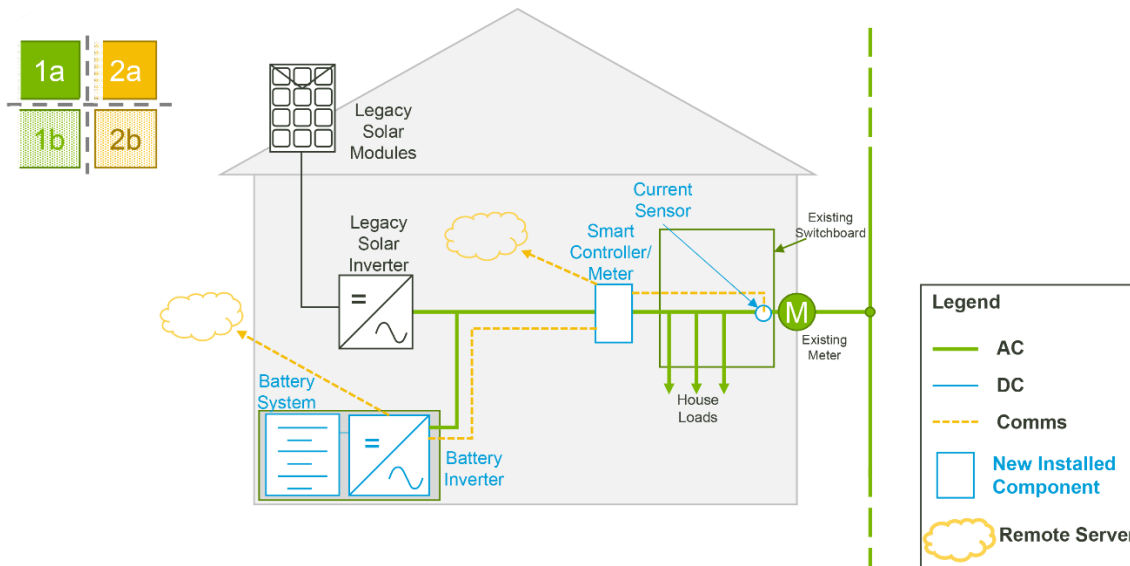


- Legacy solar modules remain, but **legacy solar inverter replaced with a new hybrid inverter**
- Otherwise equivalent to a greenfield install using a hybrid inverter (Scenario 1a)

Scenario 2b: 'Legacy solar' household, add new inverter

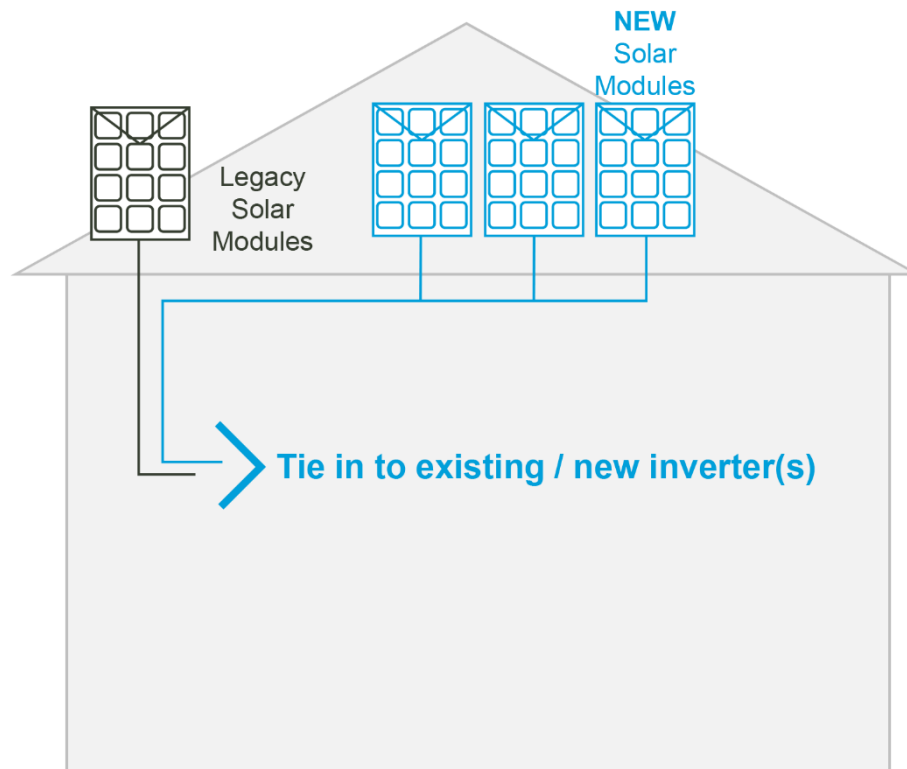


- Pre-install state of the property is shown – legacy solar modules and legacy solar inverter are present on the property



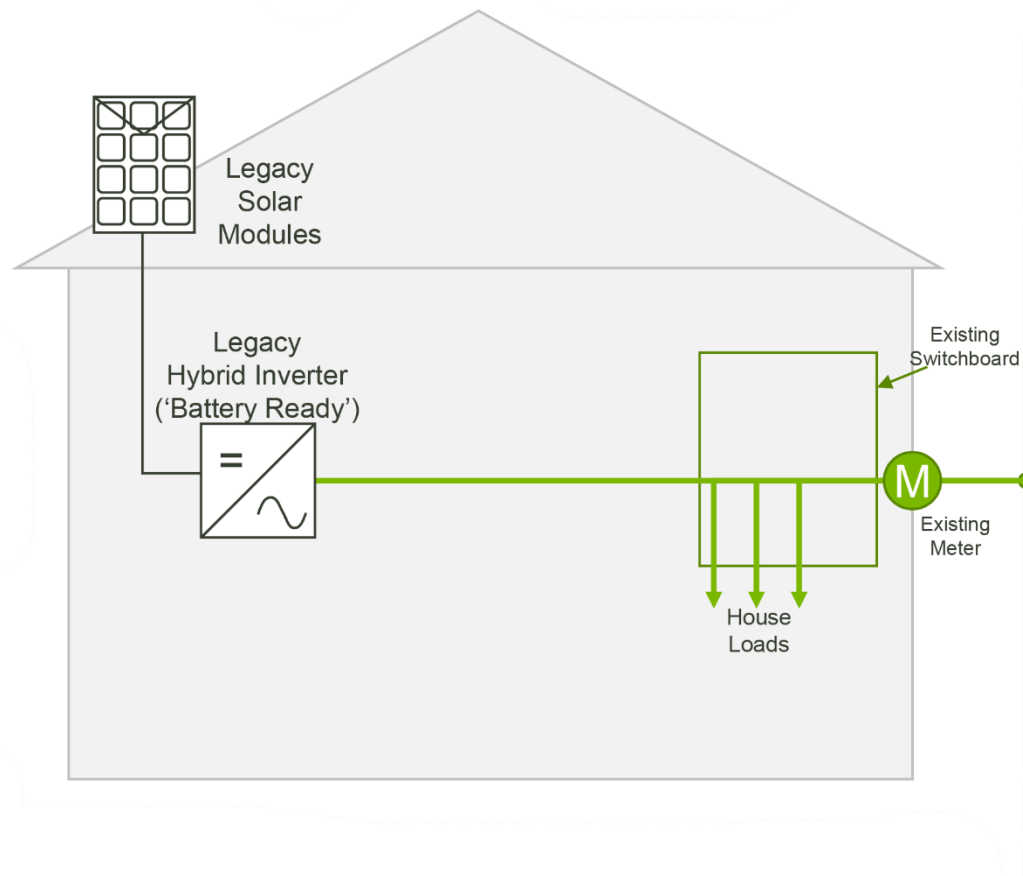
- System installed makes use of legacy solar modules and solar inverter
- A separate, new AC-coupled battery inverter and battery system are also installed
- This configuration is expected to be likely in cases where the battery product is a self-contained integrated product combining inverter and battery modules (shown via shading)
- Battery inverter and battery system may instead be separate products

Adding/replacing solar modules on a brownfield site



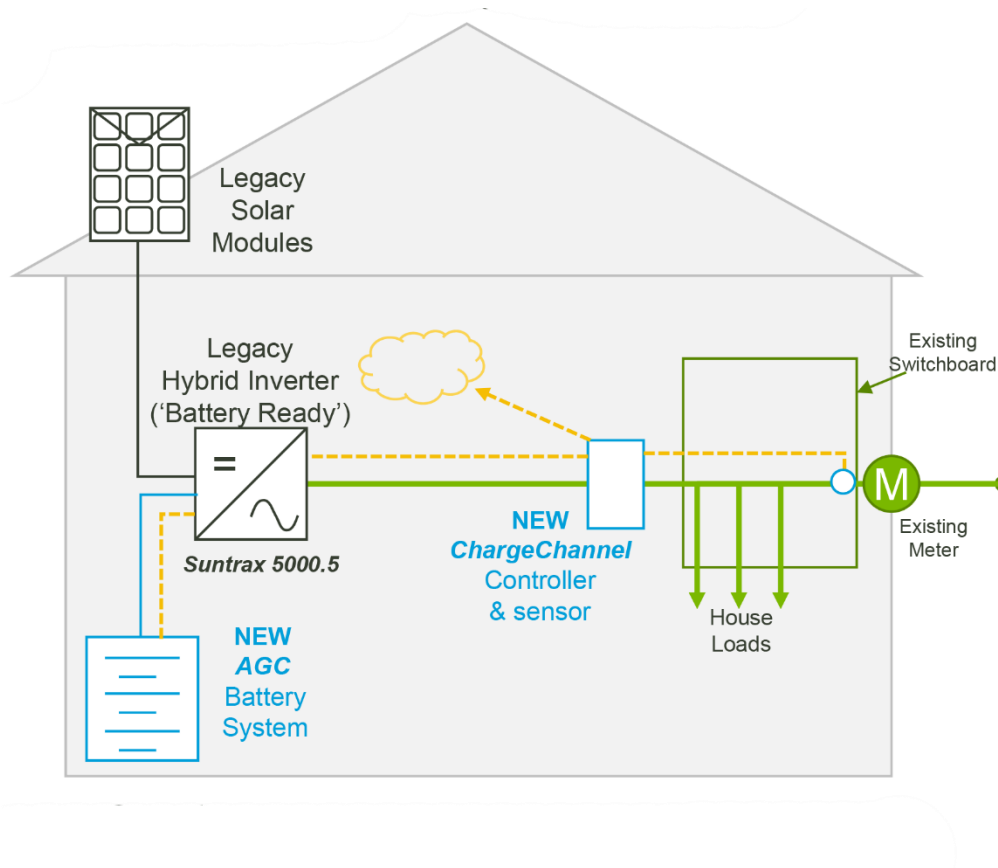
- Applicants to the HBS may decide to replace or add to existing rooftop solar modules on their household, concurrently with the battery supply/install work being done under the HBS.
- Any addition or replacement of solar modules is not covered under the HBS.
- This scenario is effectively a variation of Scenario 2a or 2b.
- As part of the installation, any legacy or newly-installed solar modules will need to be tied in appropriately, which could mean connecting to a legacy solar inverter, connecting to a new solar inverter, and/or connecting into a hybrid inverter.

Making use of components already on site (1/2)



- Customers interested in a HBS subsidy may already have some relevant components installed on their property – an example (shown here) could be a ‘battery ready’ hybrid inverter that had been installed in anticipation of adding a future battery system, or an existing smart energy controller.
- The intent of the scheme is to ensure that customers can make appropriate use of components that are already installed, while ensuring they end up with systems that are no less VPP-capable than the complete new systems otherwise being provided under the scheme.
- **Existing installed system components can be incorporated into a system eligible for HBS subsidy only if the resulting final installed system is identical to the provider’s approved offering under the scheme.**
- The subsidy amount is calculated only on the basis of new installed storage capacity (kWh) – the subsidy is not calculated on battery storage that is already installed or in a used condition.

Making use of components already on site (2/2)



- As an example, assume a customer already has a *Suntrax 5000.5* hybrid inverter on site, and wants to install a battery system eligible for the HBS subsidy while making use of this existing component.
- That customer can either:
- Find a HBS provider that already includes a *Suntrax 5000.5* inverter as part of a HBS-approved offering, and have that provider supply/install the *other* components in that approved offering so that the final system is eligible for HBS subsidy,
- OR
- Find a HBS provider that is willing to gain a new approval for a HBS-approved system that includes the *Suntrax 5000.5* inverter, and following approval, engage that provider to supply/install the *other* components so that the final system is eligible for HBS subsidy.
- For this example shown, the approved offering would be a combination of a *Suntrax 5000.5* hybrid inverter, an *AGC Battery System*, and a *ChargeChannel* controller. The subsidy amount would be based on the *AGC Battery System* capacity, as per usual.