### Samoa energy storage valuation tool



#### What are Samoa's energy goals?

One of Samoa's main goals for the energy sector is to achieve 70.0 % renewable energy use by the end of 2031, as stipulated in the Pathway for the Development of Samoa (PDS 2021/22- 2025/26). The Energy Account also provides statistics to assess and monitor the progress of that goal.

#### What are the energy accounts for Samoa?

1. Introduction This publication is the 2nd Energy Accounts ever produced, following the compilation of the first Experimental Energy Account for Samoa using the 2016 Samoa Energy Review by the Ministry of Finance. The Energy Accounts 2020 presents estimates on physical supply and use of energy (in joules1) for Samoa.

### What are the energy supply and use components for Samoa in 2020?

Table 1 is a summary of the Energy Supply and Use components for Samoa in 2020. Samoa's energy supply totaled approximately 5,282 TJ where imported energy products accounted for an estimated 69.8 % (3,689 TJ) of total supply while natural inputs from the environment accounted for the remaining 30.2 % (1,593 TJ). Source: SBS, 2022.

Does Samoa have a fuel summary report?

The ministry also compiled a Fuel Summary Reportfor the financial years 2017-18 to 2019-20 for all government ministries. Samoa Shipping Corporation (SSC). Fuel used by shipping services for sea transport was provided by the corporation as well as fuel used for their vehicle fleet operation (Appendix A9).

How much electricity is produced in Samoa?

Hence, Overall Total Electricity Production is estimated at 609.2 TJ(Refer PSUT). Conversion: 1 kWh = 3.6 Megajoules; then divide by 1000,000 to convert into Terajoules; or simply divide the kWh by 277,778 to get Terajoules. Note: Electricity Industry own uses and losses. Source: Samoa Trust Estate Corporation.

### Can software tools be used for valuing energy storage?

Taking advantages of the knowledge established in the academic literature and the expertise from the field, there are efforts from multiple parties (e.g., national laboratories, utilities, and system integrators) in developing software tools that can be used for valuing energy storage.

Energy Storage Valuation and Control Methods and Tools Di Wu, Chief Research Engineer Pacific Northwest National Laboratory. DOE OE Energy Storage Peer Review. August 6, 2024. Presentation ID: 505. Support from DOE Office of Electricity. ENERGY STORAGE DIVISION

Value; Publisher: Ministry of Natural Resources and Environment (MNRE), Samoa: Modified: 11 February 2022 Release Date: 05 July 2021 Source URL: https:// Identifier: 44b67c41-db94-4946-95a9-58ea5665d3a8

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Spatial / Geographical Coverage Location: Samoa Relevant Countries: Samoa Language: English (American Samoa) License: Public ...

It expands the functionality, accessibility, and transparency of the previous two iterations of EPRI's storage valuation tools, the Energy Storage Valuation Tool (ESVT), then the Storage Value Estimation Tool (StorageVET 1.0 & 2.0). The analytical core of the tool has been written in the free and increasingly popular Python programming language.

It further enables the specification of the resale value of any nondepreciable assets such as real estate associated with some energy storage technologies (e.g., storage reservoirs and reusable geologic caverns). A recent H2IQ Hour presentation provided an overview of how the StoreFast tool works.

Validated and Transparent Energy Storage Valuation and Optimization Tool is the final report for Energy Storage Valuation and Optimization Tool project contract number EPC-14-019 conducted by Electric Power Research Institute (EPRI). The information from this project contributes to Energy Research and Development Division''s EPIC Program.

QuESt 2.0 distinguishes itself in the crowded space of energy storage analytics tools by offering a unified platform rather than a collection of individual tools. While there are numerous tools available, these tend to focus on specific aspects of energy storage analysis and lack the integration and broad applicability that QuESt 2.0 provides.

This section selects some of the most applicable and, ideally, open source energy storage-capable valuation tools currently in use. These tools range in their scope, approach, purpose, and implementation, all of which impact their applicability and usability.

E3 Consultants Eric Cutter and Ben Haley have developed and improved the Energy Storage Valuation Tool (ESVT) for the Electric Power Research Institute (EPRI) for the past several years. Earlier this week the ESVT simulation software was used by EPRI to perform Cost-Effectiveness evaluation of approximately 30 cases in the California Public Utilities ...

This paper provides a review of software tools for ESS valuation and design. A review of analysis tools for evaluating the technical impacts of energy storage deployments is also provided, as well as a discussion of development trends for valuation and design tools.

Numerous used cases and valuation tools have been developed during the past few years to help various stakeholders identify value streams and evaluate the economic benefits of ESS, as reported in Energy Storage Valuation: A Review of Use Cases and Modeling Tools. There exist numerous similarities and differences among these tools.

o HB 2193--guidelines to recover energy storage project costs from ratepayers o Cites EPRI's Energy Storage



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Valuation Tool (ESVT) as an "established model" AB2514 Storage Proceeding ESVT Gap Analysis: o Public accessibility oValidation StorageVET Fills These Gaps: o Online and free to the public

energy storage valuation fundamentals and overview of modeling techniques and tools patrick balducci argonne national laboratory. hawaii public utilities commission energy storage systems workshops. session 4: energy storage valuation modeling february 7, 2024

Web: https://www.ecomax.info.pl

