





Projects

Files

Programs

Portfolios

RFQs

















ENERGY = EMPOWERMENT = EFFICIENCY

Mini-Grid Acceleration Scheme

Implemented by:



Instructions: Click on the Programs tab to access all program documents.

Getting Started Video

User Guide

Odyssey Updates

The Odyssey team is committed to providing you the rapid support you need as you try out the platform. Simply enter your comments or questions in the chat box on the screen, and we promise you a quick response.

ECREEE WEEKLY Q&A SESSIONS

Every Tuesday at 2 pm GMT Odyssey will be hosting Q&A sessions for the ECREEE Call for Proposals. JOIN US! (https://zoom.us/j/506741283) or

Read More

View an Odyssey Introductory training session

Read More

Odyssey has been in the news

Odyssey recently surpassed 550 projects being planned within the software, requiring a total estimated investment of more than USD \$500 p

Check out our latest features in Greentech Med







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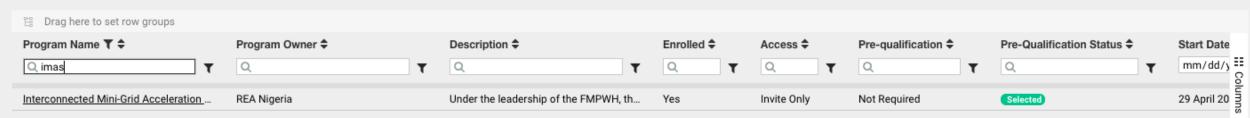
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Interconnected Mini-Grid Acceleration Scheme (IMAS)

Documents

Projects

Interconnected Mini-Grid Acceleration Scheme (IMAS)

Under the leadership of the FMPWH, the main objective of the present intervention will be to design and test a tender model for interconnected Solar mini-grids, the Interconnected Mini-grid Acceleration Scheme (IMAS). The selected bidders will be supported with partial capital (in-kind) grants and technical assistance on project development provided by the REA (using funding from NESP). The tender will use similar criteria for the selection of mini-grid developers as a financier would use to do its due diligence on any loan applicant. It is expected that this will reduce substantially the efforts that will need to be made by the selected developers to access finance for their projects.

The IMAS aims at providing a minimum of 75,000 people or 15,000 customers (incl. residential, public, commercial or productive users using single phase or three-phase effective connections) with access to reliable electricity services at an affordable tariff via privately-led solar IMG projects in Nigeria by September 2020. The Scheme will be jointly managed by representatives from the FMPWH, REA in the person of the Executive Director REF and NESP (Scheme Managers).











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Interconnected Mini-Grid Acceleration Scheme (IMAS)

Home Documents	Projects		
Folder or File Name		≡	Size
□ Interco	onnected Mini-Grid Acceleration Scheme (IMAS)		535 KB
□ 🗎 20	0190204_IMAS_Operational_Guidelines.docx		316 KB
	MAS_Call_for_Proposals.docx		219 KB







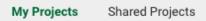
Home Projects Programs

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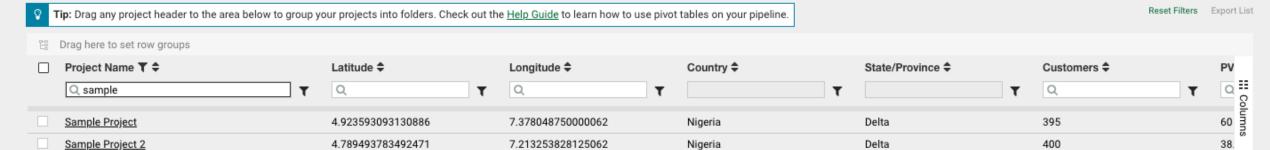


















Programs

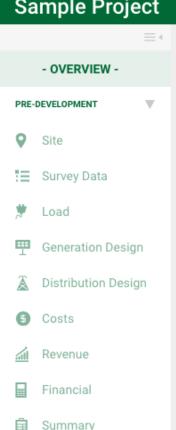
Portfolios

RFQs

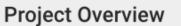
IRR: -30.09% LCOE: \$0.29 / kWh Adjusted CAPEX: \$180,251.00



Sample Project



 ∇



PRE-DEVELOPMENT

Have lots of data? Use our Excel templates to quickly upload your data or contact support@odysseyenergysolutions.com for help.

View Templates

DEVELOPMENT

Program: Interconnected Mini-Grid Acceleration Scheme (IMAS)

OPERATIONS

All sections marked Required should be completely filled out for submission to Interconnected Mini-Grid Acceleration Scheme (IMAS)

SETTINGS

Site

In this section, you'll provide identifying information about your site including the location and latitude/longitude coordinates.

View Guide

≣ Survey Data

If you used the Odyssey Mobile Survey Tool, your results will appear in this section.

View Guide

Edit





DEVELOPMENT





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Sample Project 6



PRE-DEVELOPMENT





!≡ Survey Data



Generation Design







Summary

DEVELOPMENT

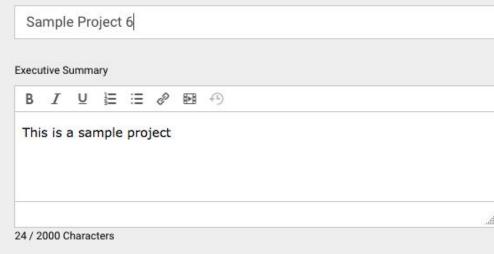


Site Specifications

Project Overview Project Files Site Details Have lots of data? Use our Excel templates to quickly upload your data or contact support@odysseyenergysolutions.com for help.

View Templates









Home Projects

Programs

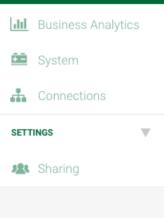
Portfolios

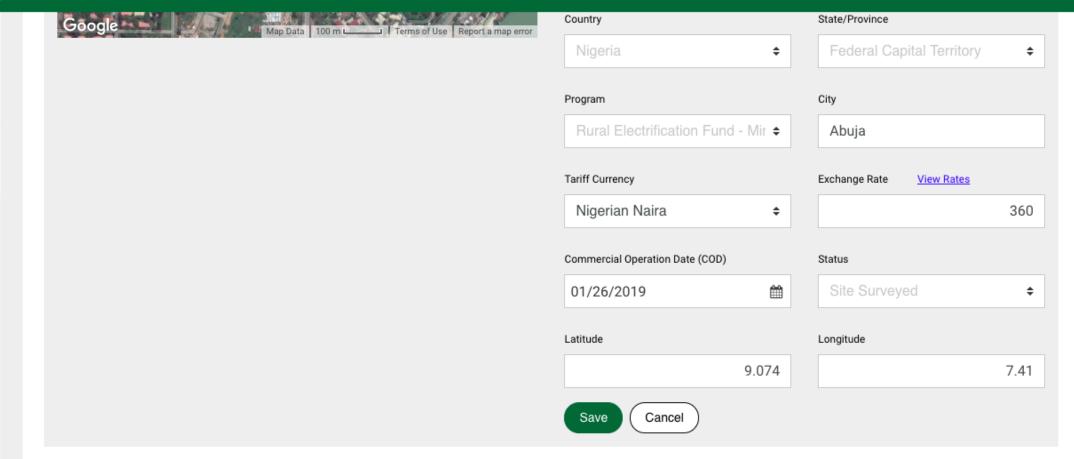
RFQs

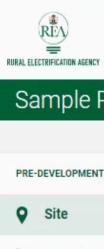
Hunter Dudley 🔻

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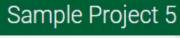


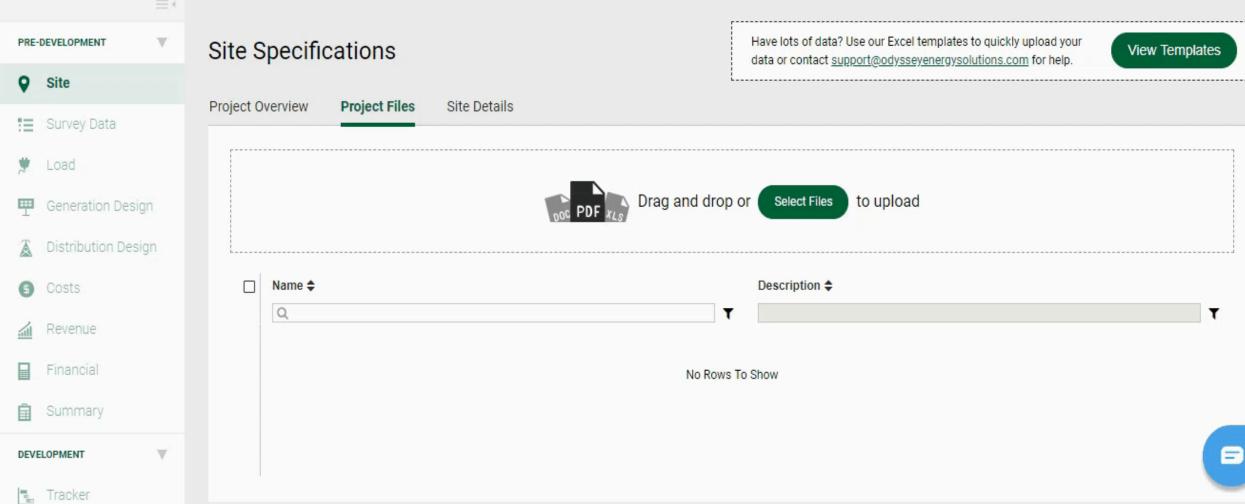


RFQs

Trina Tychell ▼











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Sample Project 5

one opecinications

Project Overview

data or contact support@odysseyenergysolutions.com for help.

view rempiaces

Site

Survey Data

Load



Distribution Design

Costs

Revenue

Financial

Summary

DEVELOPMENT



OPERATIONS



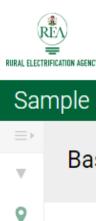
Project Files

Site Details

Category Name	Value	Unit	Source	Source Detail
Households	600		•	Oct. 2018 Survey
Population	1,300		Government ▼	Government 2016 Statistics
Population density	25	per km^2 ▼	Other ▼	
Distance from grid	12.5	km ▼	Government ▼	Government 2016 Statistics
List commercial/industrial facilities	Posho Mill, carpentry		Survey ▼	Oct. 2018 Survey
Number of shops (small)	2		Survey ▼	Oct. 2018 Survey
Key economic activities	Agriculture		Survey ▼	Oct. 2018 Survey
List major agricultural crops, if any	Yams, sorgum, spices		Survey ▼	Oct. 2018 Survey
Min lighting/mobile charging spend per month	50	Nigerian Naira ▼	Survey ▼	Oct. 2018 Survey
Max lighting/mobile charging spend per month	250	Nigerian Naira ▼	Survey ▼	Oct. 2018 Survey
Number of diesel generators	2 in village center		Survey ▼	Oct. 2018 Survey
Min diesel spend per month	1,800	Nigerian Naira ▼	Survey ▼	Oct. 2018 Survey
Max diesel spend per month	210,000	Nigerian Naira ▼	Survey ▼	Oct. 2018 Survey















Programs

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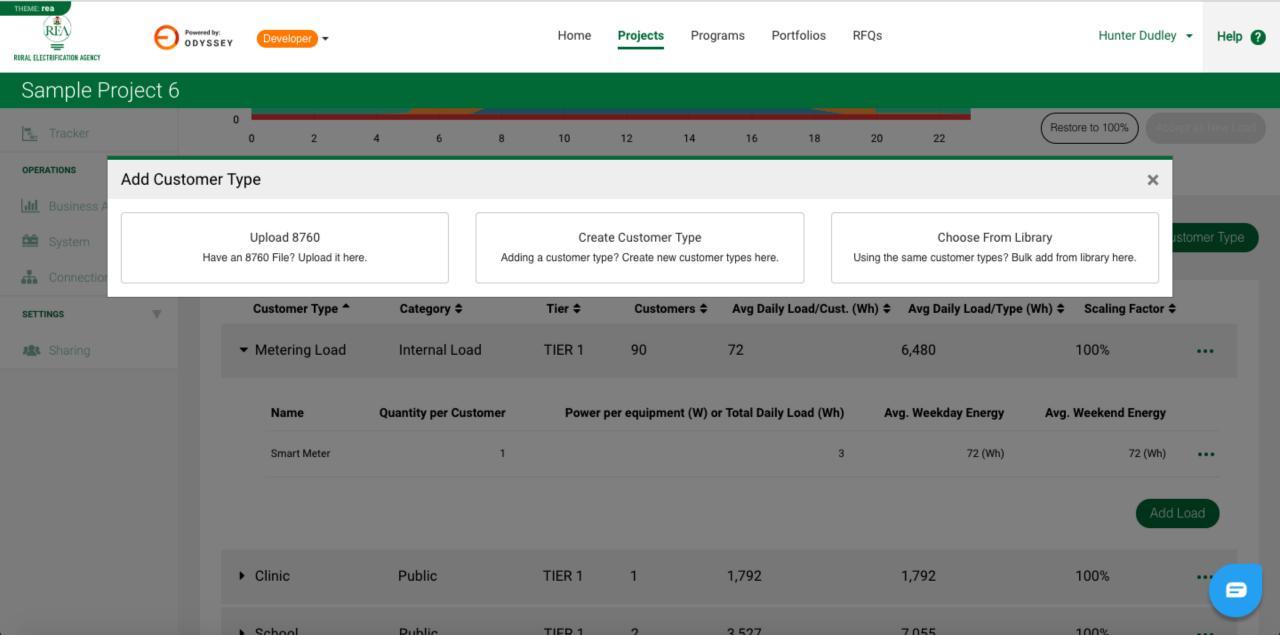


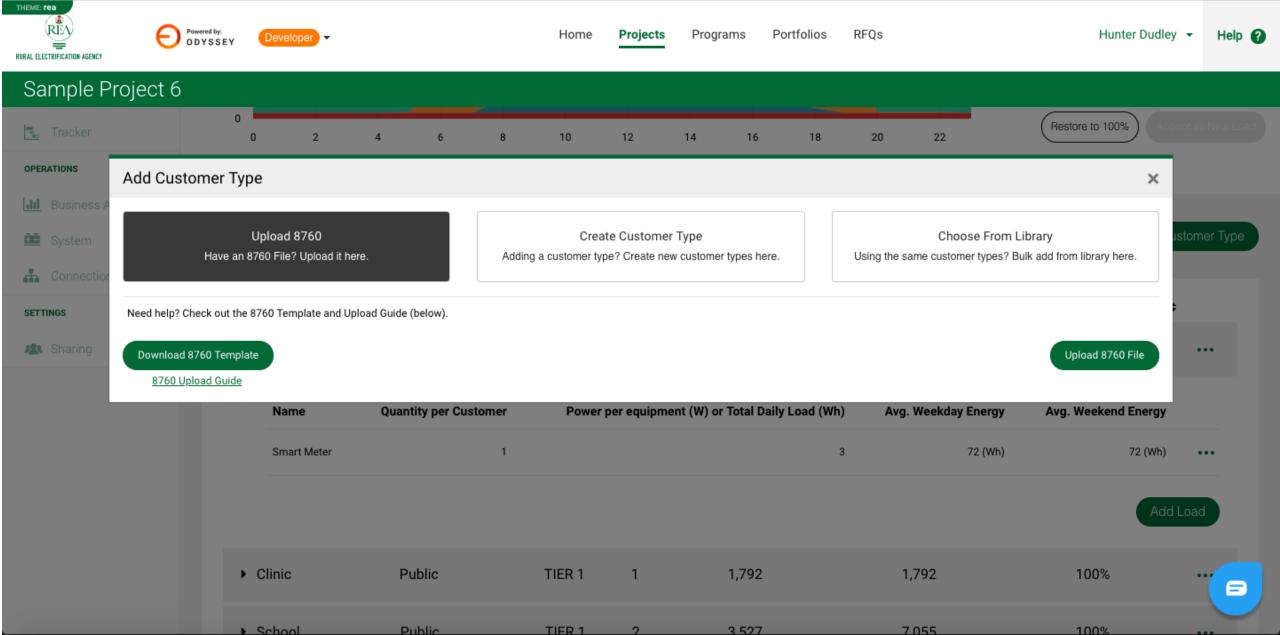
Results will be calculated once you add Customer Types and Equipment

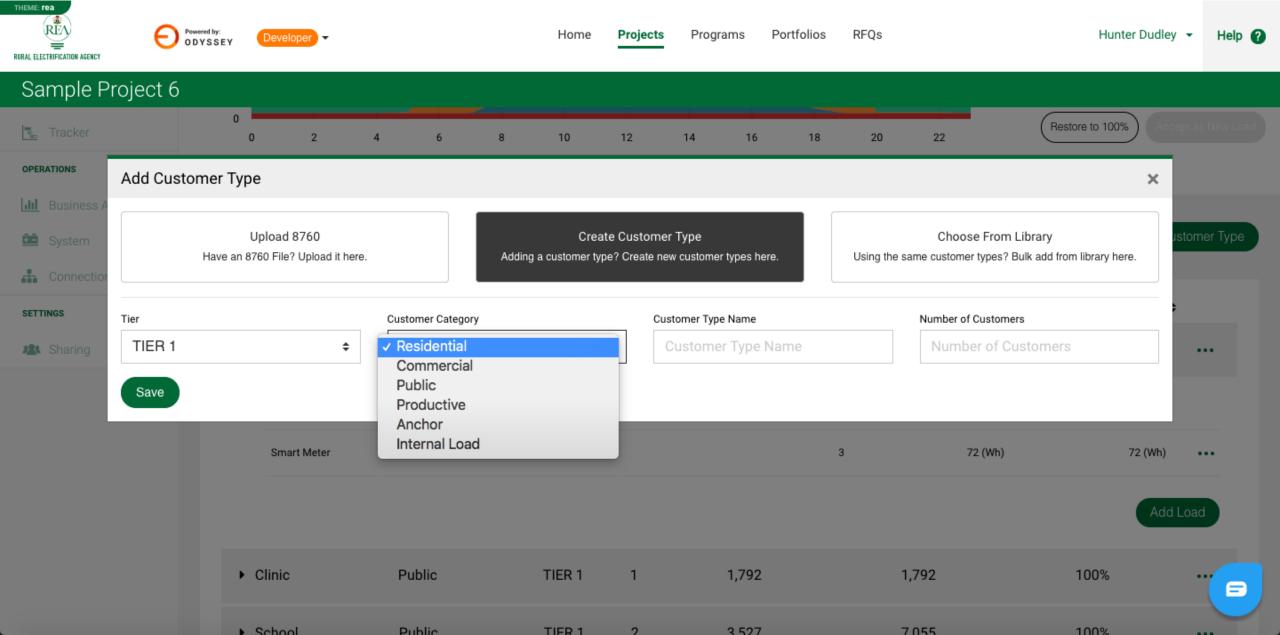


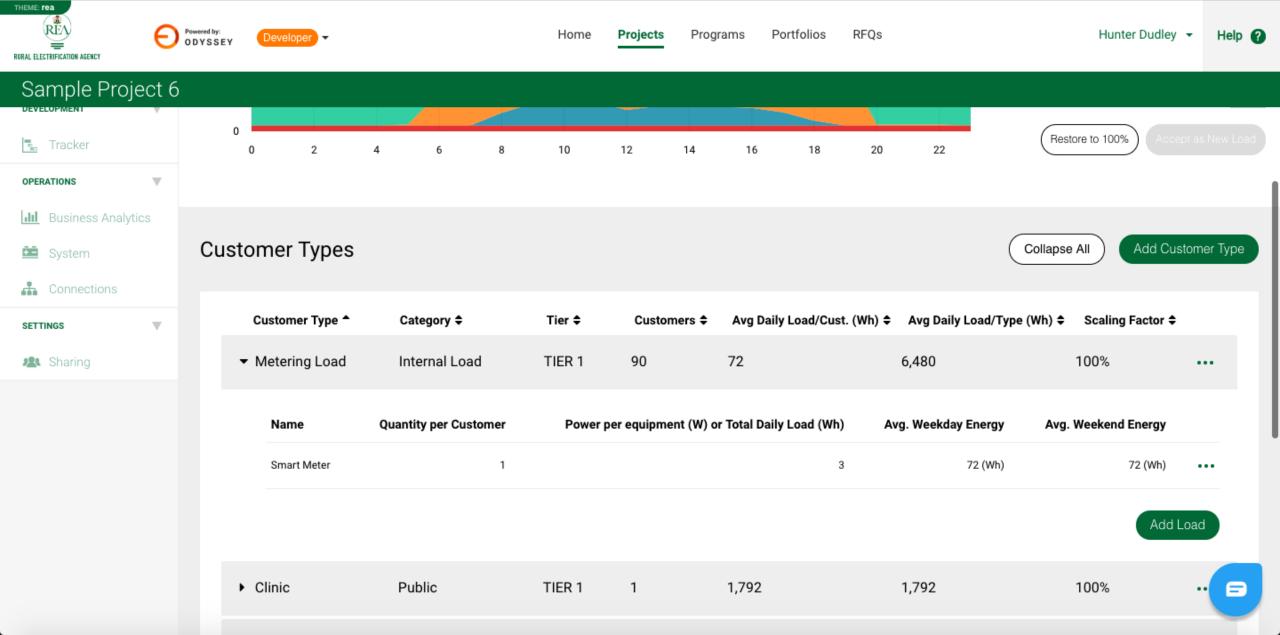


















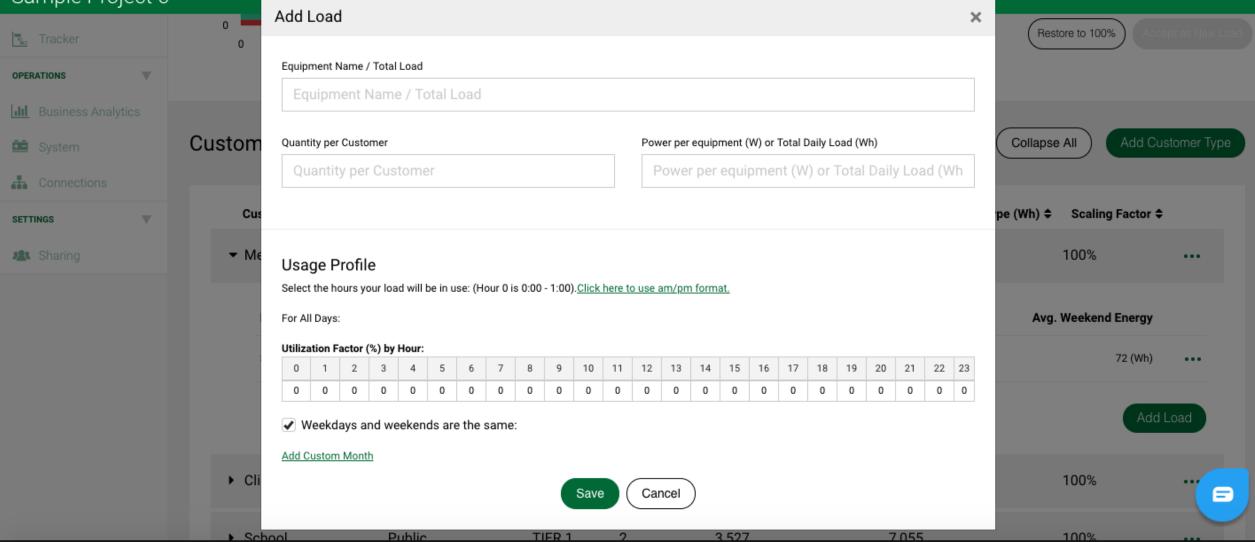
Home Projects Programs

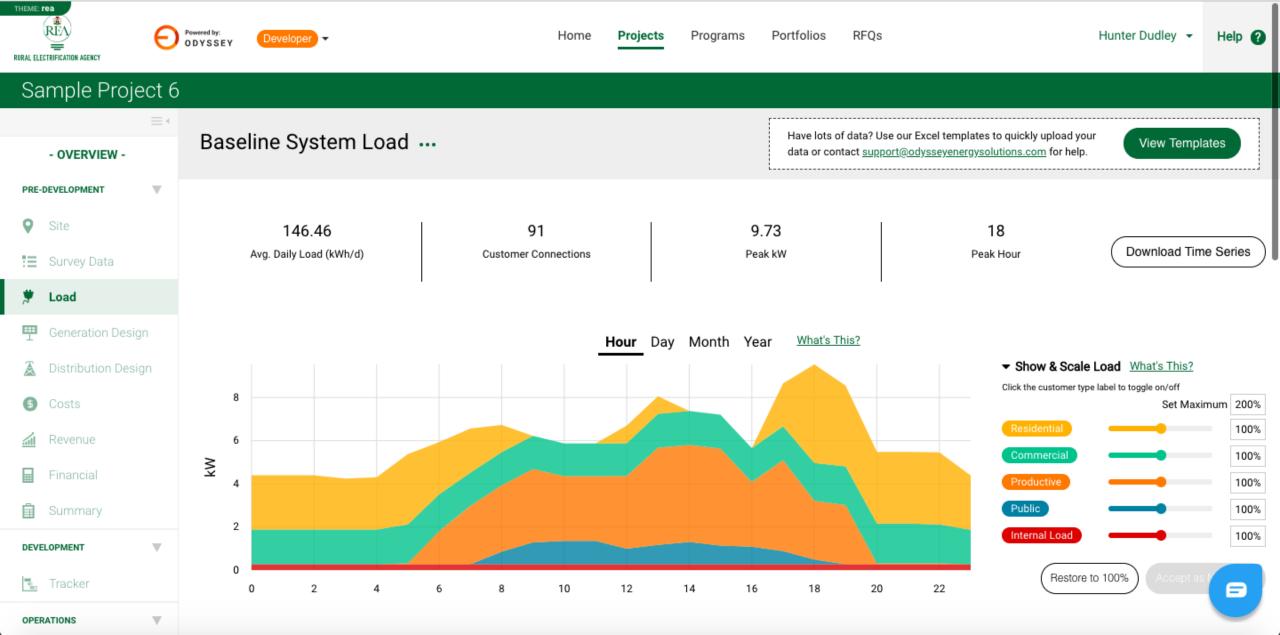
Portfolios

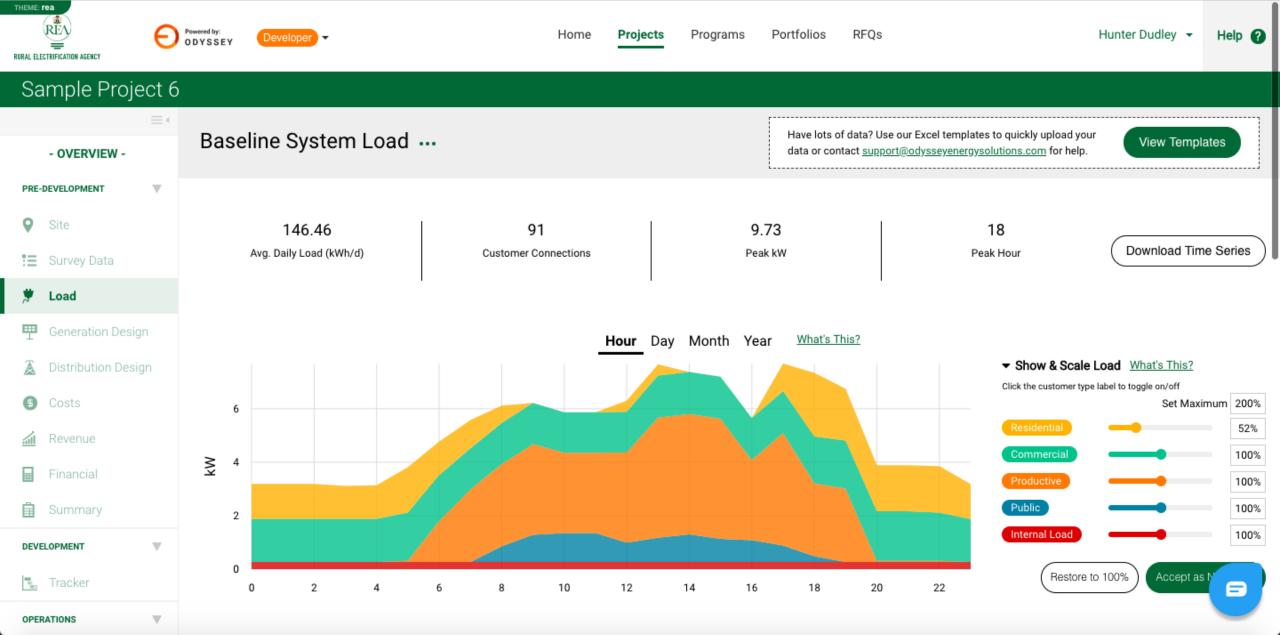
RFQs

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Help 🕜

Sample Project IRR: -30.09% LCOE: \$0.29 / kWh Adjusted CAPEX: \$180,251.00 Calculate = ∢

- OVERVIEW -

PRE-DEVELOPMENT



Site





Load













DEVELOPMENT



Tracker

Generation Designs

Below is a list of all generation designs you have created for this load. To let us know which load and design you would like to use for future calculations, you must select one as your final design by clicking the ••• and selecting as a final design.

Create New Generation Design -

View Templates

Name	Source	Solar PV	Generator	Storage	Load Met	Renewable Fraction	OPEX	CAPEX		
Generation Design 1	HOMER	30 kW	Diesel, 20 kW	80 kWh, Lithium Ion	98%	Not Calculated	\$1,100.00/yr	\$70,250.00		•••
DC Design	HOMER	60 kW	Diesel, 16 kW	202.17 kWh, Lead Acid	100%	73.3%	\$7,821.86/yr	\$109,695.00	Active Design	•••









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Sample Project

Survey Data

Load

Generation Design

Distribution Design

Costs

Revenue

Financial

Summary

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Tracker

OPERATIONS

Business Analytics

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System

This is your Active Generation Design. Why we do this?

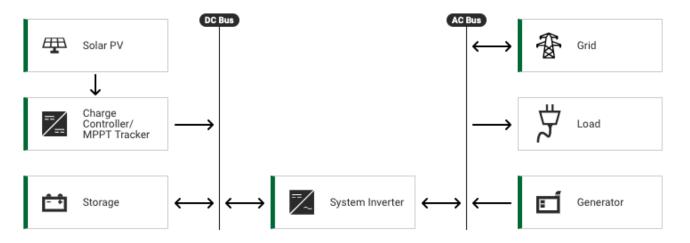
AC-Coupled System

DC Design

DC-Coupled System

DC-Coupled System Components

Drag and Drop components into your custom generation design.



IRR: -30.09%

LCOE: \$0.29 / kWh

Model with HOMER:

Adjusted CAPEX: \$180,251.00

Save and Return to List

Calculate









Balance of System and Fixed Costs









Replacement Needed:

Projects Programs Portfolios

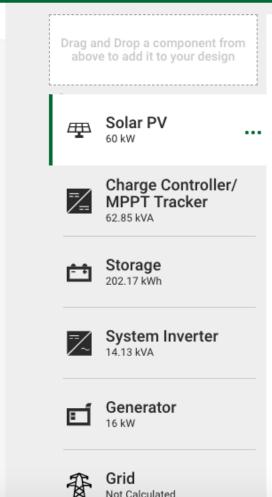
RFQs

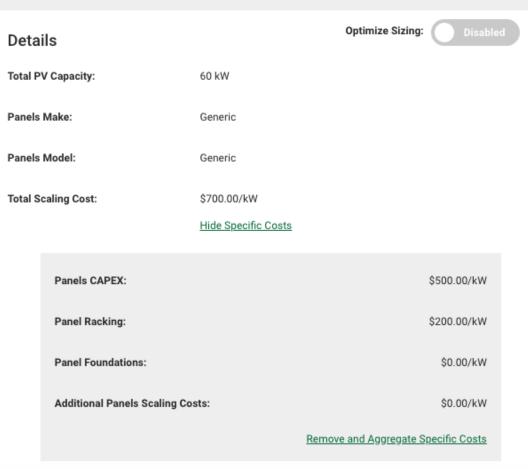
IRR: -30.09%



Calculate

Sample Project



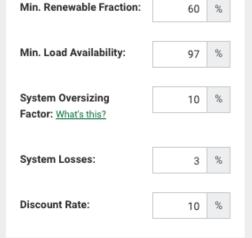


Yes

Input Constraints

Adjusted CAPEX: \$180,251.00

LCOE: \$0.29 / kWh



Model Output









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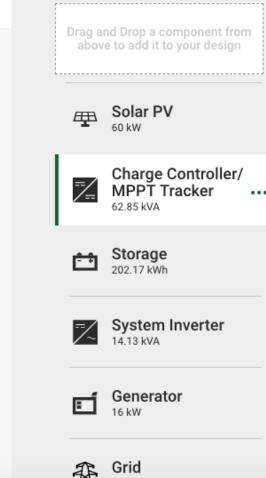
RFQs

LCOE: \$0.29 / kWh

Help ?

Calculate

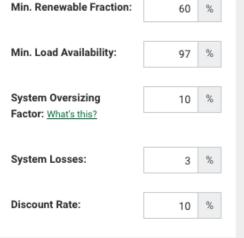




Optimize Sizing: Enabled Details CC/MPPT Capacity: 62.85 kVA CC/MPPT Make: Generic CC/MPPT Model: Generic Total Scaling Cost: \$200.00/kVA Add Specific Costs Replacement Needed: No Total CC/MPPT Scaling Costs: \$12,570.00

Input Constraints

Adjusted CAPEX: \$180,251.00



Model Output





A0 00 11411









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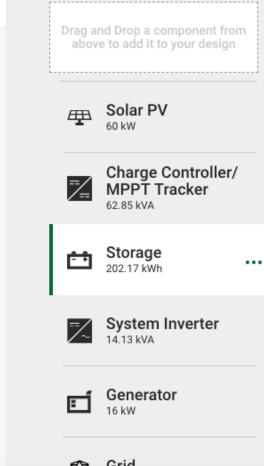
IRR: -30.09%

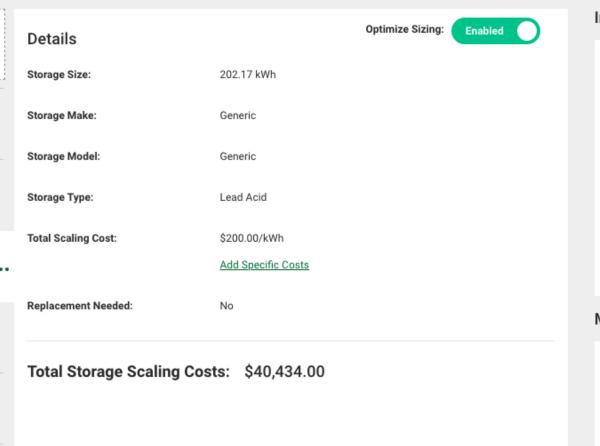
LCOE: \$0.29 / kWh



Calculate

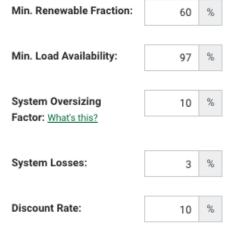
Sample Project Data Integrations





Input Constraints

Adjusted CAPEX: \$180,251.00



Model Output









Generator



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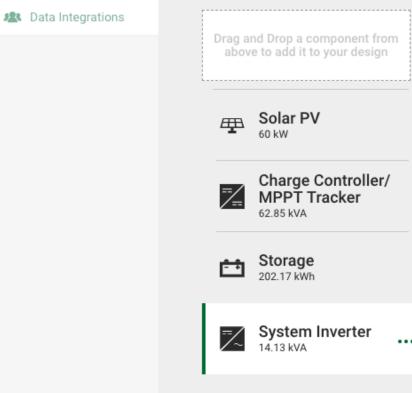
,

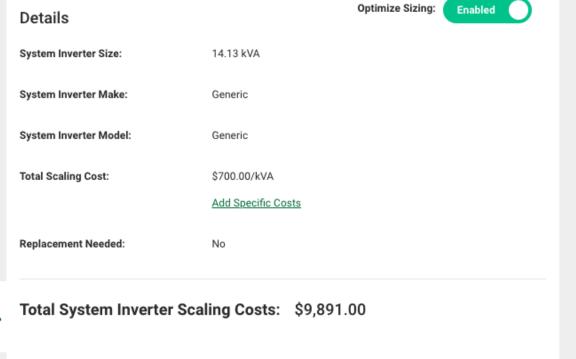
LCOE: \$0.29 / kWh

Help 🕜

Calculate

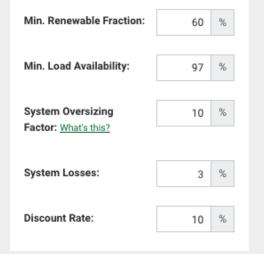






Input Constraints

Adjusted CAPEX: \$180,251.00



Model Output



A0 00 11 11 11









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IRR: -30.09%

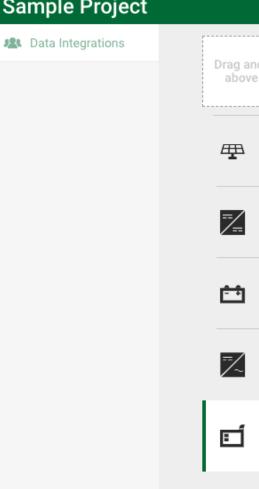
LCOE: \$0.29 / kWh

Help ?

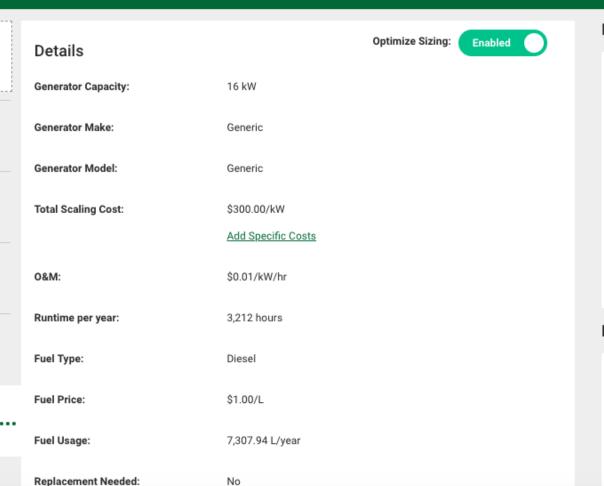
Calculate



Sample Project

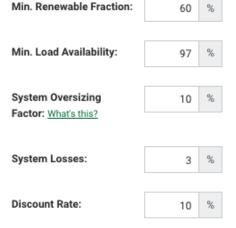




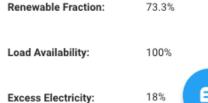


Input Constraints

Adjusted CAPEX: \$180,251.00



Model Output











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Help ?

Calculate

60

97

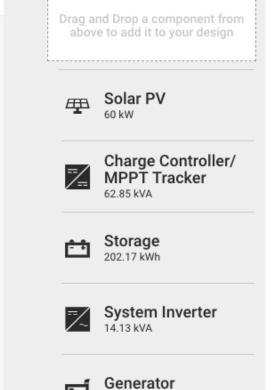
10

3 %

10 %

Sample Project

Data Integrations



Details **Buy Price:**

Sell Price:

Are there hours when the grid is not available?:

Daytime availability (6:00 - 18:00):

Nighttime availability (18:00 - 6:00):

\$0.15

10 hours

4 hours

\$0.00

Yes

LCOE: \$0.29 / kWh

System Oversizing Factor: What's this?

System Losses:

Discount Rate:

Adjusted CAPEX: \$180,251.00

Input Constraints

Min. Renewable Fraction:

Min. Load Availability:

Model Output

Renewable Fraction: 73.3%

Load Availability: 100%

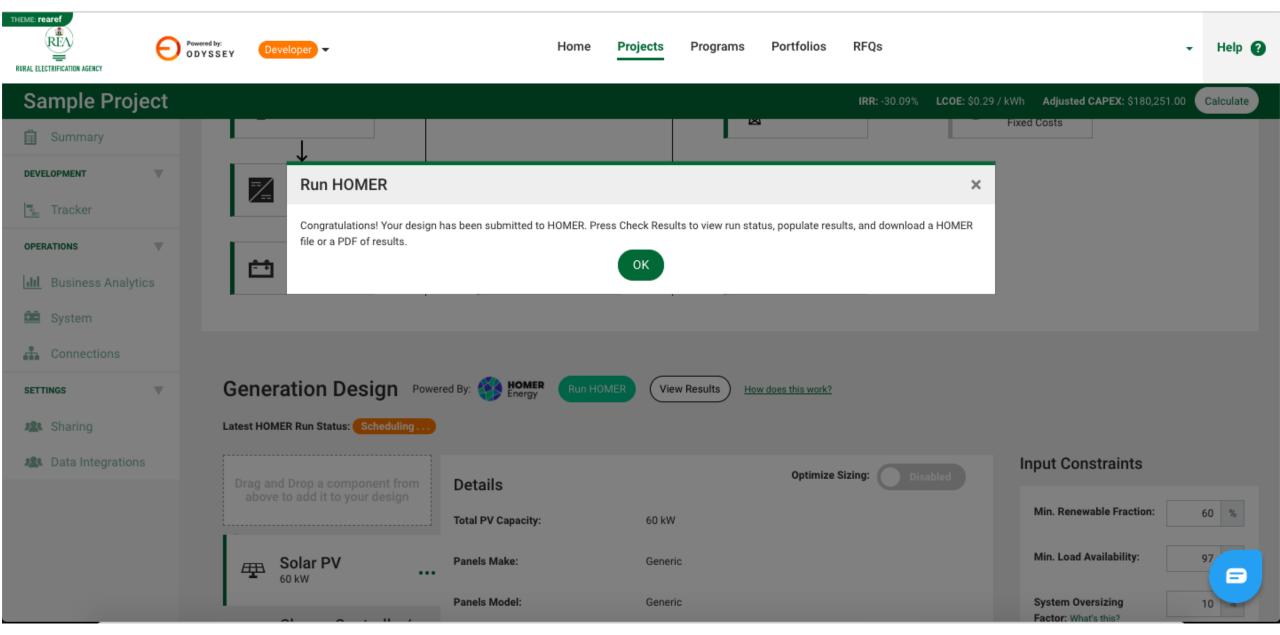
Excess Electricity:

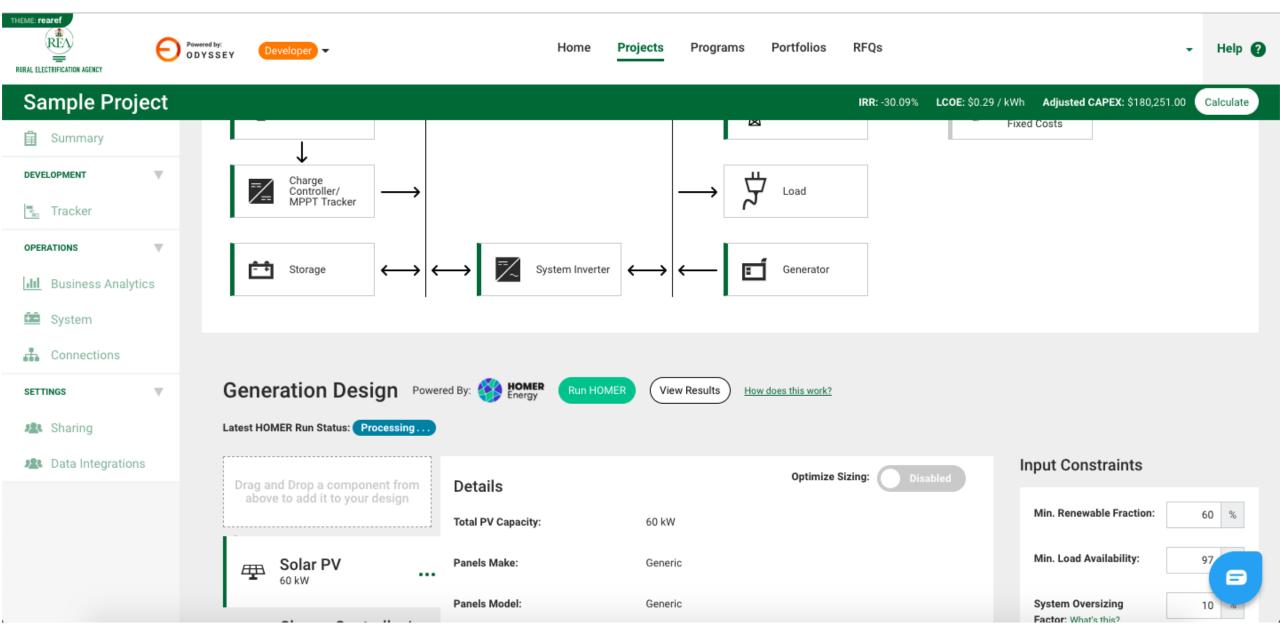
A0 00 0 11 11 11





•••











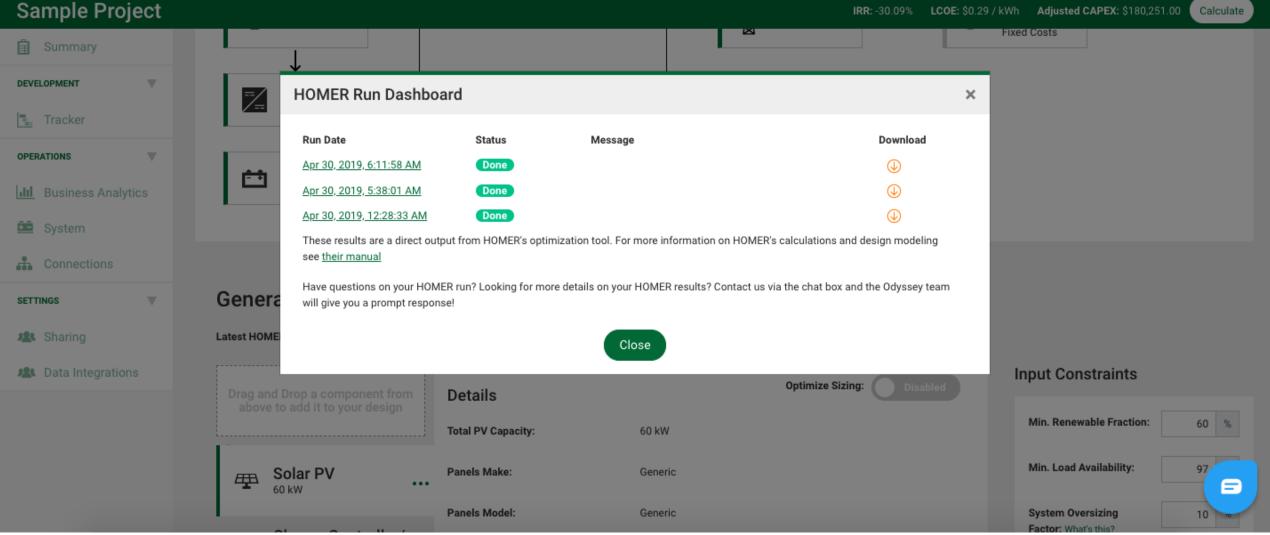
Projects

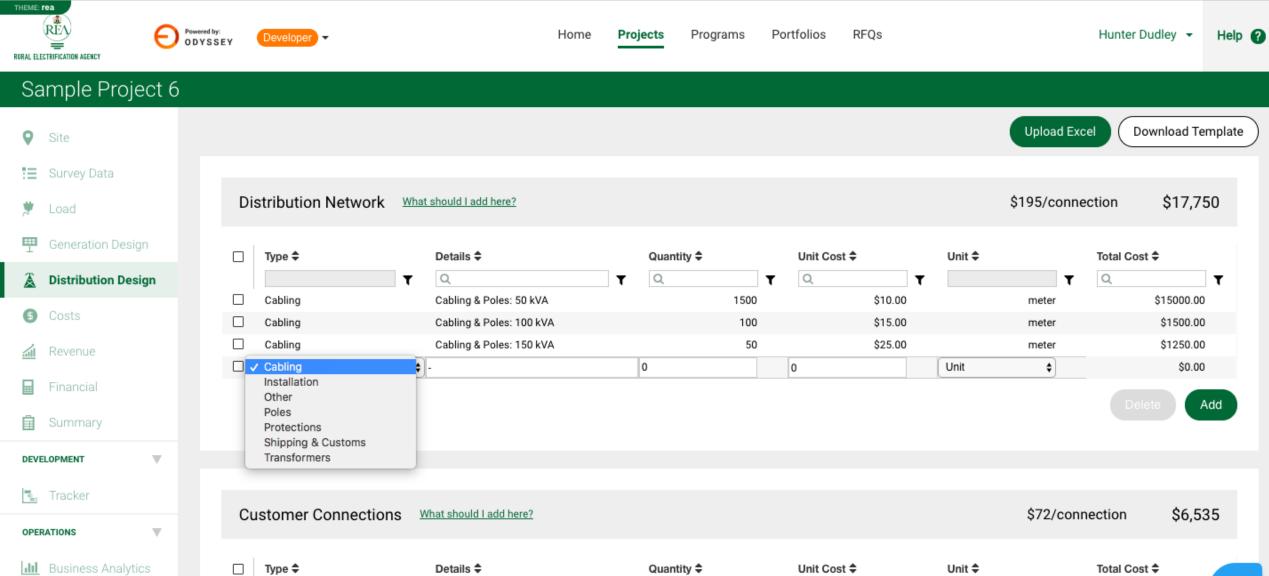
Programs

Portfolios

RFQs LCOE: \$0.29 / kWh Adjusted CAPEX: \$180,251.00

Help ?









Q



Q

Q

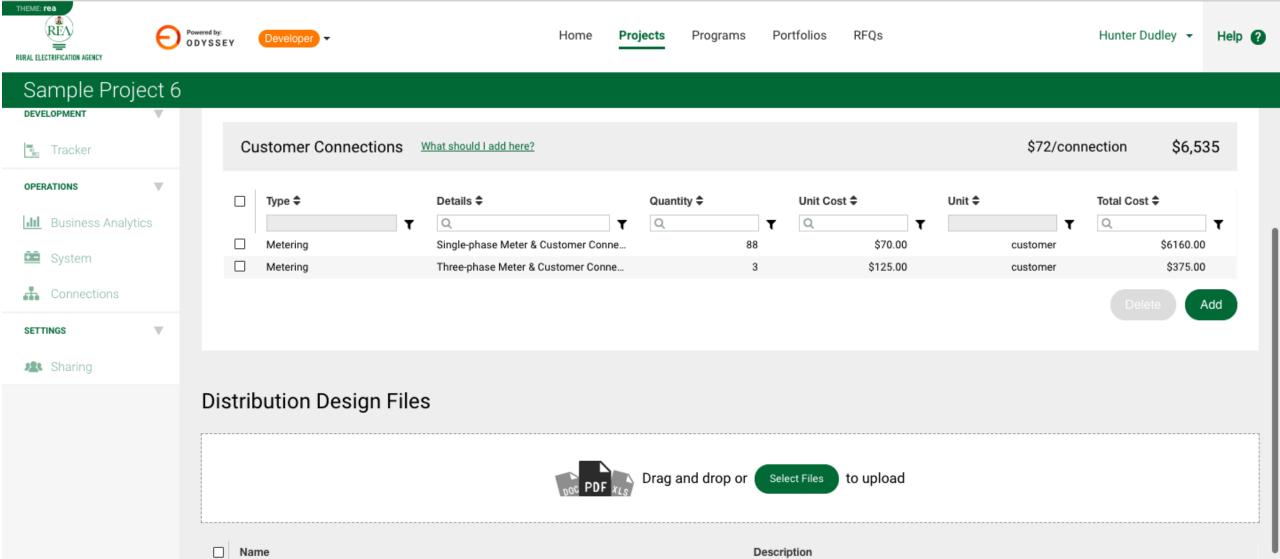
88

\$70.00

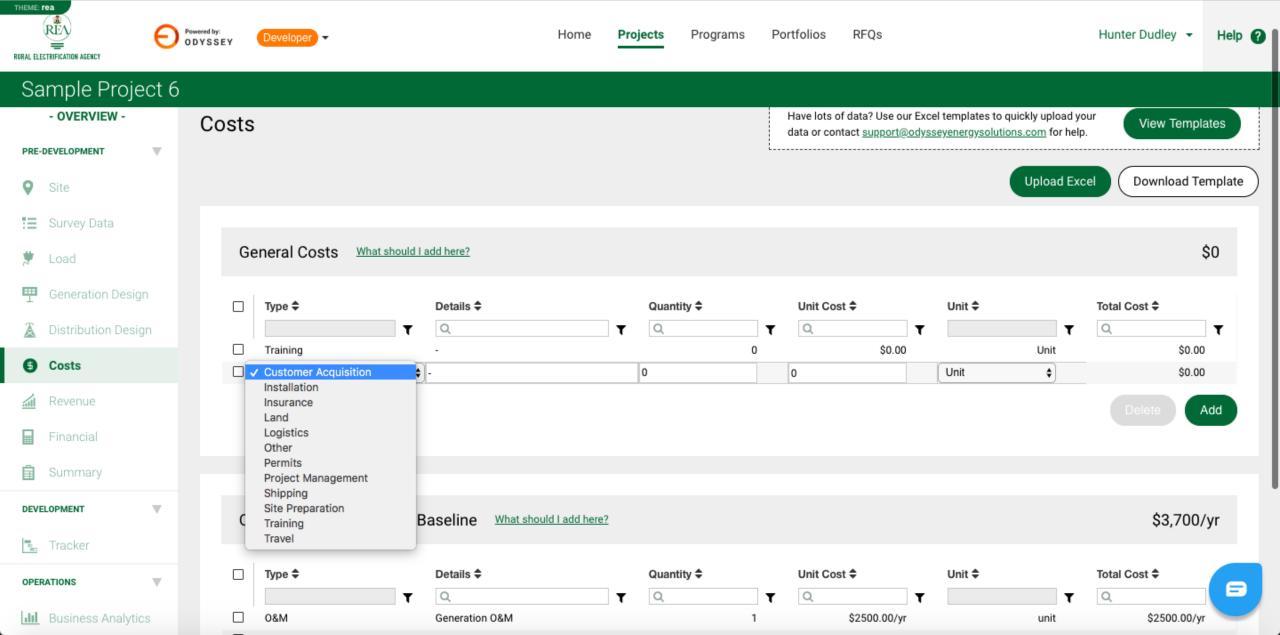
customer Q

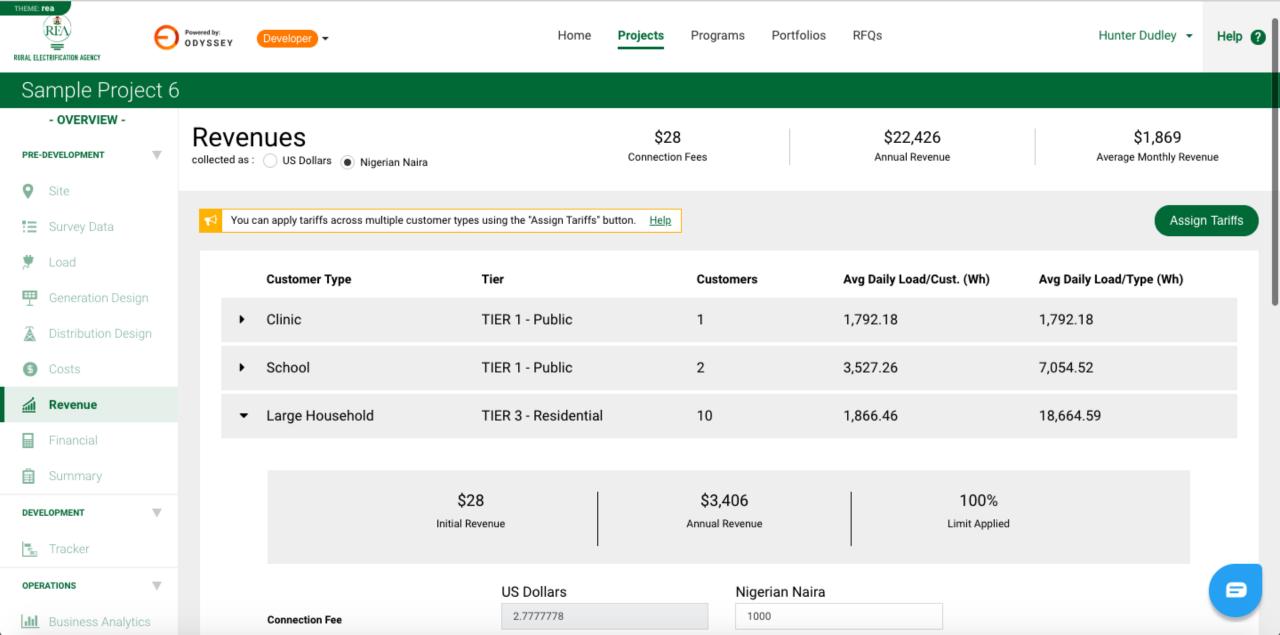
\$6160.00

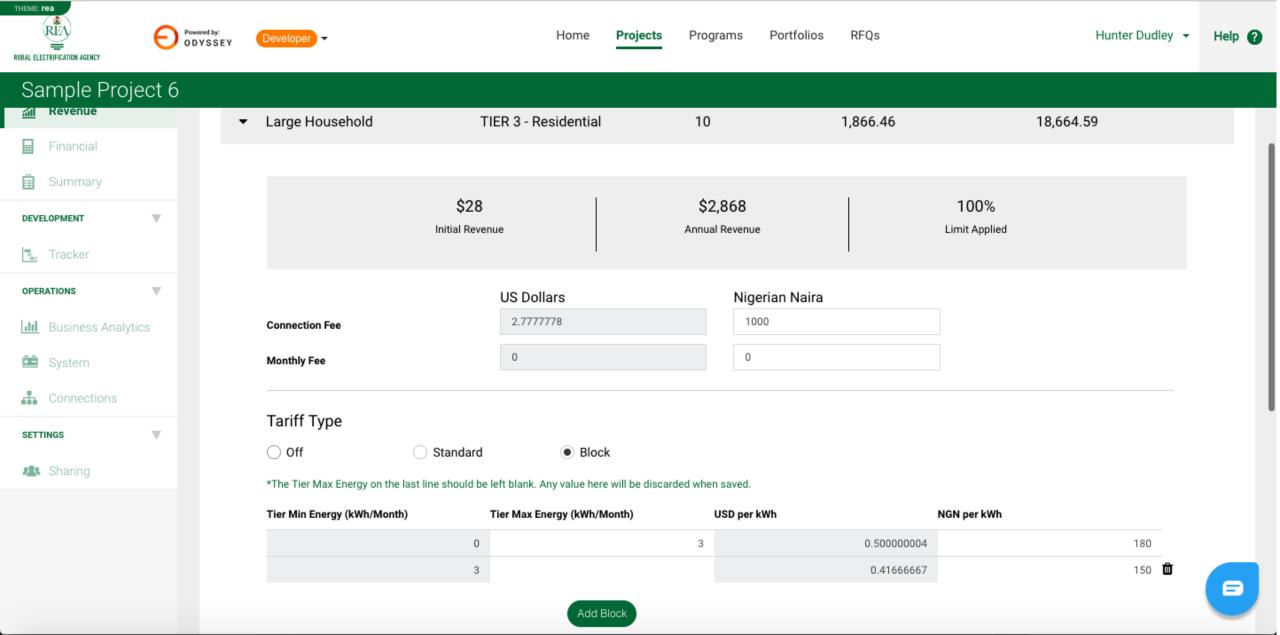




Q













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Time of Use Plan

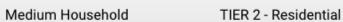
Off Standard Plan

*Please enter start and end times for the TOU block, such that entering a start time of 8 and an end time of 16 would mean an adjustment to power use between 8:00am and 4:00pm (8:00 and 16:00), and would not apply for any of the 4:00pm (16:00) hour.

Start Time	End Time	Modifier % 🕢
10	20	80 🛍

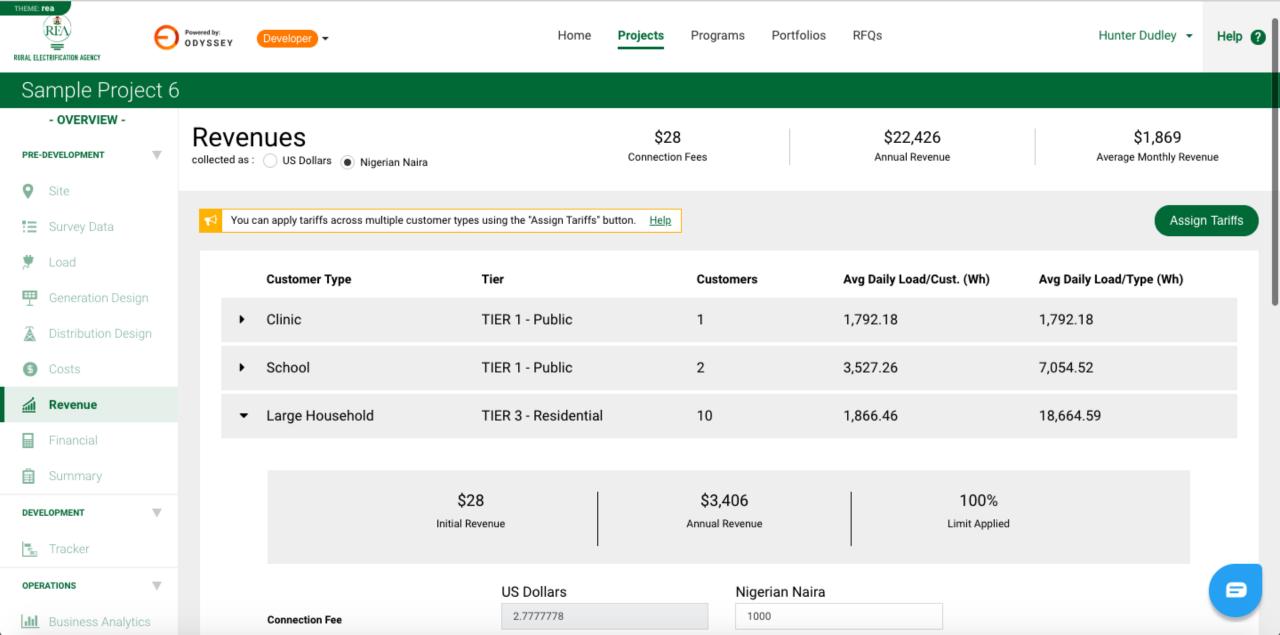
Add Time Period















Programs

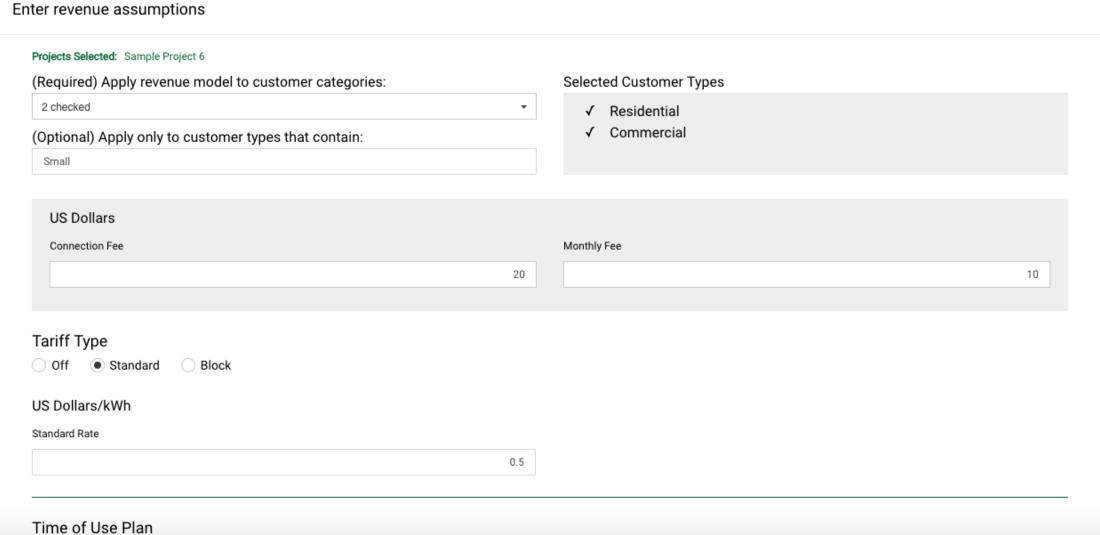
Portfolios

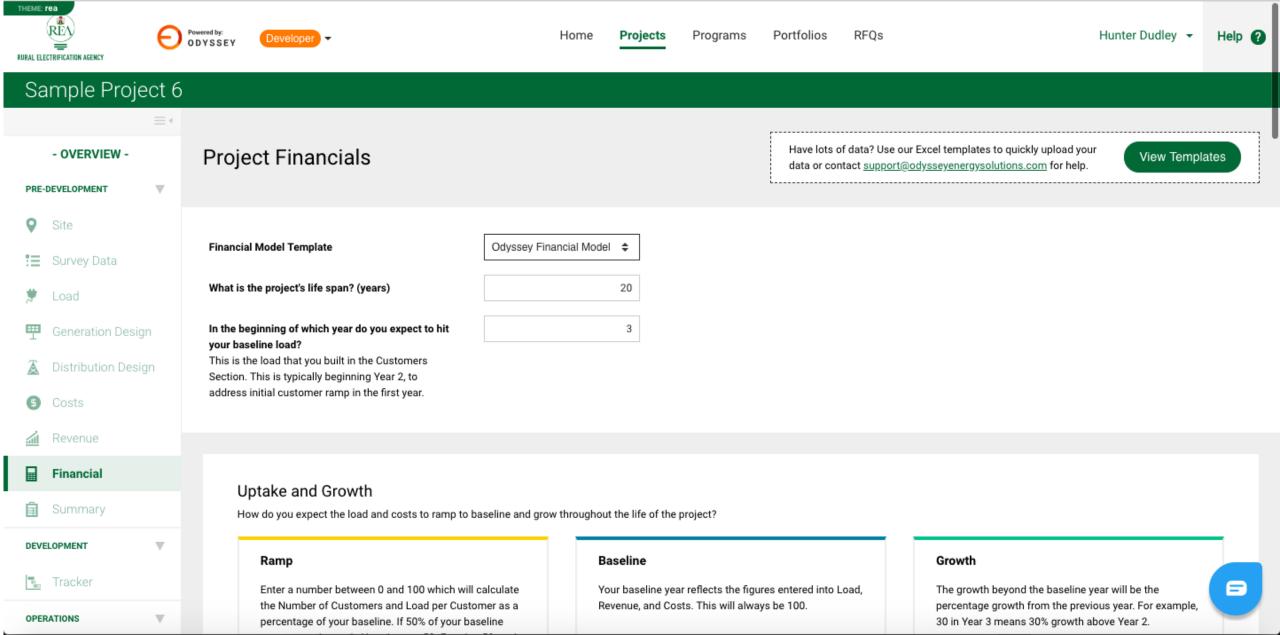
RFQs

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10		









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Connections

SETTINGS

Sharing ...

Reminder: All numbers are converted to percentages. Entering 20 here means 20%.

Load Growth		Ramp (%)		Baseline (%)	Growth (%)											
Residential	Number of Customers	75	90	100	5	4	2	1	1	1	0	0	0	0	0	0
	Load per Customer	100	100	100	2	1	1	0	0	0	0	0	0	0	0	0
Commercial	Number of Customers	75	90	100	5	4	3	3	1	1	0	0	0	0	0	0
	Load per Customer	100	100	100	2	2	2	2	0	0	0	0	0	0	0	0
Productive	Number of Customers	75	90	100	2	2	2	1	1	1	0	0	0	0	0	0
	Load per Customer	100	100	100	2	2	2	2	0	0	0	0	0	0	0	0
Public	Number of Customers	75	90	100	2	2	2	1	1	1	0	0	0	0	0	0
	Load per Customer	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
Anchor	Number of Customers	75	90	100	0	0	0	0	0	0	0	0	0	0	0	0
	Load per Customer	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
Total Load Growth					5.76	4.81	3.86	2.80	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00

Costs Growth OPEX 75 90 100 Fuel Cost 0 0 0 0 0 0 0 0 0

The growth rate applies to all years after baseline.

Annual Tariff Escalation



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The growth rate applies to all years after baseline.

Annual Tariff Escalation

Additional Revenues and Costs

Note: If you have forecasted load growth beyond the capacity of your system, make sure to add expansion costs here.

Year of plant operation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Additional replacement/expansion costs	100	100	100	3	3	3	3	3	3	3	3	3	3	3	3	3
Appliance program revenues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Appliance program costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	·															
Other revenues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





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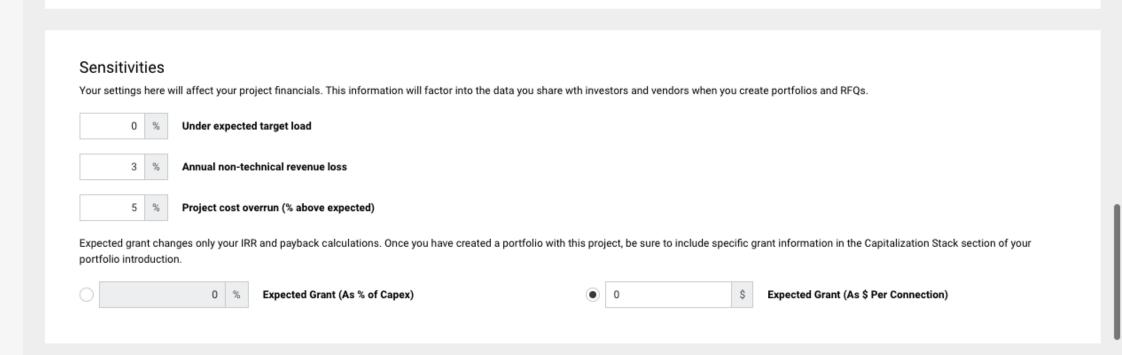
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Save and Run Calculation

Financials calculated using: Odyssey Financial Model

Download Project Financial Model

Upload Project Financial Model

Project-only Financials

Based on project cashflows only (unlevered, pre-tax).



Sample Project 6

Save and Run Calculation

Financials calculated using: Odyssey Financial Model

Download Project Financial Model

Upload Project Financial Model

Project-only Financials

Based on project cashflows only (unlevered, pre-tax).

IRR 14.19%

Payback 8 years LCOE \$0.22 / kWh

ARPU		Financial Metrics	
Adjusted CAPEX	\$130,654.65	Total Revenues (Project Life)	\$621,976.12
Residential ARPU	\$8.11	Total Expenses (Project Life)	\$96,097.14
Commercial ARPU	\$57.17	financial-results-arpu.total-margin-label	\$26,293.95
Public ARPU	\$44.85	CAPEX	\$124,433.00
Productive ARPU	\$188.02	CAPEX / Connection	\$1,252.97
Anchor ARPU	\$0.00	kWh Sold at Baseline	45,377.04 kWh

Sample Project 6

Update Results

Overall Financials

These financials include leverage and tax assumptions, as well as related business cashflows entered in the Excel financial model.

IRR **7.75%**

Payback 12 years

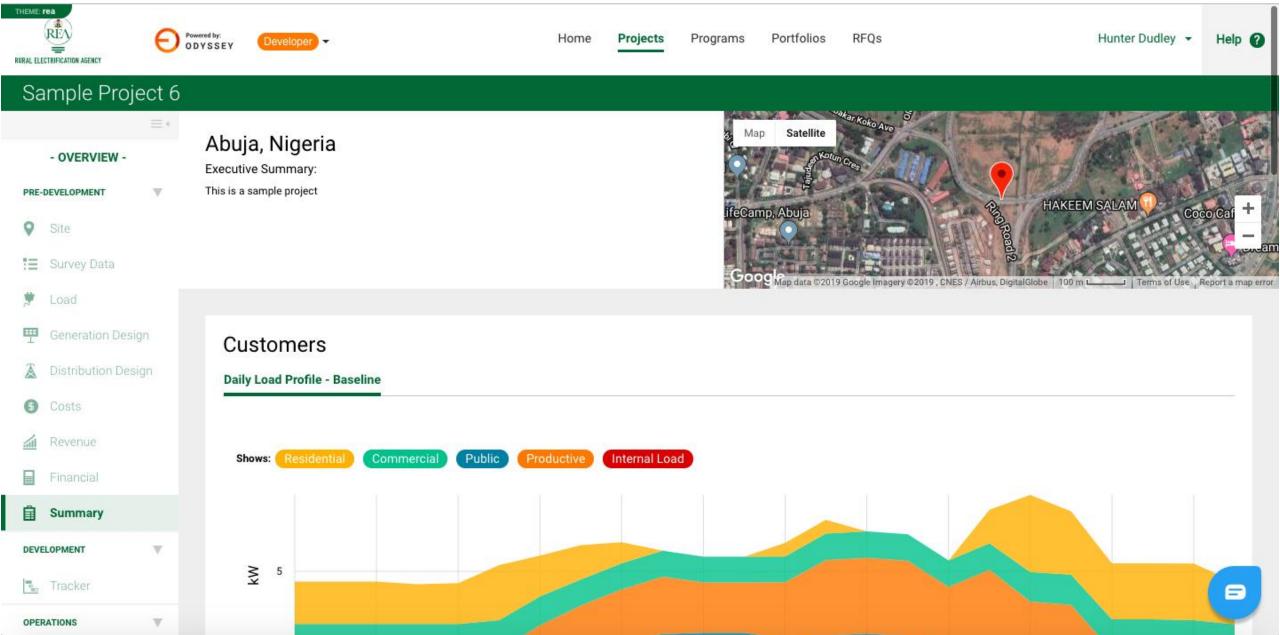
Financial Metrics

NPV to Equity

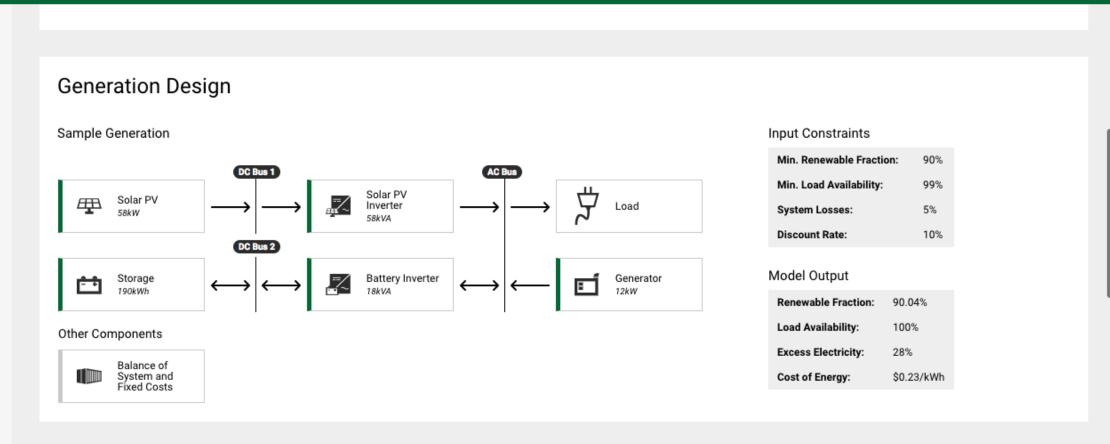
Min DSCR N/A

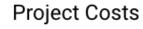
Average DSCR 1.25

Update Results



Sample Project 6











Projects

Programs Portfolios

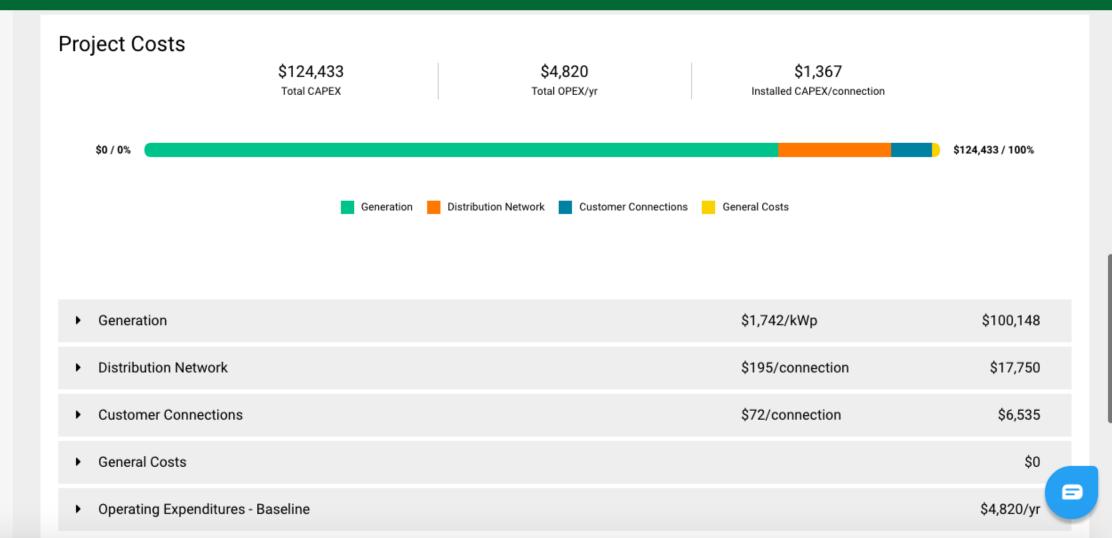
s R

RFQs

Hunter Dudley 🔻











Projects

Programs

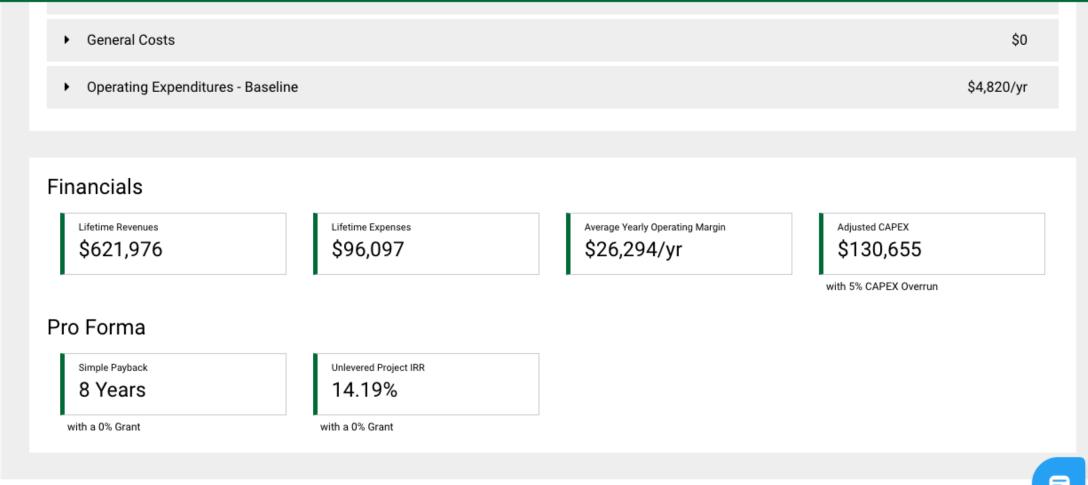
Portfolios

RFQs

Hunter Dudley ▼

Help ?

Sample Project 6







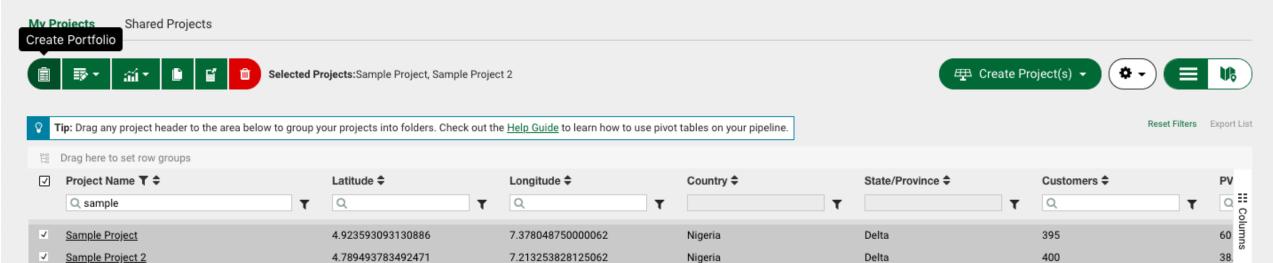


Home Projects Programs

Portfolios

RFQs



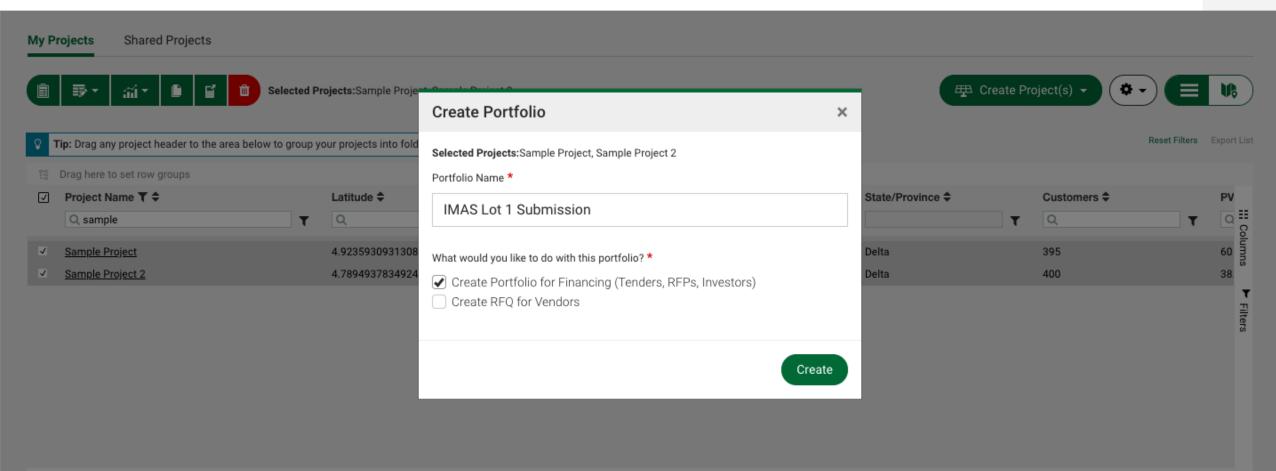


Total Rows: 4 Filtered: 2 Selected: 2



Filters

Total Rows: 4 Filtered: 2 Selected: 2









Projects

Programs

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RFQs

Edit

Edit

Edit



IMAS Lot 1 Submission

Overview

Introduction

Business Plan

Project Data

Data Room

Portfolio Submission

Summary

Level 1

Introduction

Your introduction is the first set of information that investors will see about your portfolio. The more specific you are the better the chance you'll get a match.

Level 2

Business Plan

Now is the time to provide a more complete summary of your portfolio. The goal of this section is to introduce an investor to your projects and general business model and approach.

Level 3

Project Data

In this section you'll see all the projects you've included in this portfolio.



Level 4











Projects

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Define your Introduction

If you publish this portfolio to the Finance Marketplace, investors will see the summary information below and your organization's public profile. To edit your profile, click here.

Interconnected Mini-Grid Acceleration Scheme (IMAS) - submission deadline: 06 July 2019 00:00

Update Project Data



Overview

Note: Some fields in this portfolio are not editable. These fields are calculated from the projects contained in this portfolio.

Total number of projects in portfolio: 2

Country: Nigeria

Description *

Provide an overview of this portfolio, including your target markets, key characteristics about your customers and load, unique aspects of your business model, and any other relevant information about your business plan.







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Interconnected Mini-Grid Acceleration Scheme (IMAS) - submission deadline: 06 July 2019 00:00

Update Project Data

Total Portfolio Cost:			\$240,787.00		
Current Status of Capi	tal *				
\$0 / 0%	Committed & Pending	W Needed	\$240,787 / 100%	Additional Short-term Capit	al Required
Туре	Select Status Committed Semi Committed	% of Total Cost	Amount	Working Capital: Appliance Financing:	\$
⊗ ⊕ // Grant	Pending V Needed	21 %	\$ 50,000.00	Interested in a co-dev	velopment partnership?
Total		21%	\$50,000.00		

Total Grant: \$118,500.00

\$149.06 Grant per Connection:









Projects Programs

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IMAS Lot 1 Submission

Overview

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Interconnected Mini-Grid Acceleration Scheme (IMAS) - submission deadline: 06 July 2019 00:00

Save Draft

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Portfolio Submission

Summary

Portfolio Description

Project Sites Customers Other Activities Construction and O&M Risks

Describe any innovative approaches/ideas/technologies implemented for your project sites

 $\mathsf{B} \quad I \quad \mathsf{U} \quad \boxminus \quad \varnothing \quad \mathsf{E} \mathrel{!} = \mathscr{O} \quad \mathsf{E} \mathrel{!} = \mathscr{O}$

How did you factor innovation into your selection of technology, affordability, business model and site plan/service?

0 / 3000 Characters

Provide a brief general description of the project sites included in this portfolio











Projects Home

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Portfolios

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IMAS Lot 1 Submission

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Summary



Projects cannot be added or removed from a portfolio once created. You can always create a new portfolio from your projects list.

Interconnected Mini-Grid Acceleration Scheme (IMAS) - submission deadline: 06 July 2019 00:00



Project Name	Location	PV Capacity	Total CAPEX	Expected COD
Sample Project	City, Nigeria	60 kW	\$185,865.00	30-Apr-2020
Sample Project 2	City, Nigeria	38.7 kW	\$60,536.00	30-Apr-2020







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Data Room

Use this section to document information provided in the investor's document library. Upload draft documents if available; these can be replaced by final documents at a later date. Please provide any helpful guidance to the investor regarding where to find information, including document titles and page numbers.

Projects

Note: Data Room information can be accessed only by investors with Odyssey login credentials who have been explicitly permissioned by the owner.

Document Checklist

Financial statements for last three years

Here is a list of suggested documentation. Check off once you've added it to your document Library. Use the Notes section to provide any helpful guidance to the investor regarding where to find information, including document titles and page numbers.

Developer Information	
Developer Information	Notes
Corporate org chart	Example: document titles and page numbers
Capitalization table	Example: document titles and page numbers







Projects Programs

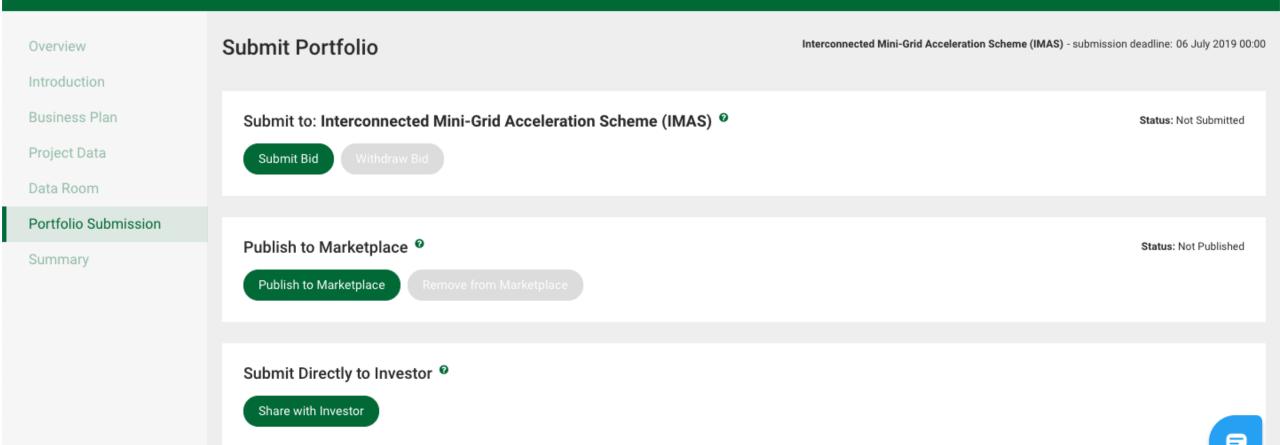
Portfolios

RFQs

Help



IMAS Lot 1 Submission









Projects

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Summary

Submit Portfolio

Submit to: Interconnected Mini-Grid Acceleration Scheme (IMAS)

Withdraw Bid

Publish to Marketplace 9

Publish to Marketplace

Submit Directly to Investor 9

Share with Investor

Interconnected Mini-Grid Acceleration Scheme (IMAS) - submission deadline: 06 July 2019 00:00

Status: Submitted 30 April 2019 00:18

Status: Not Published











Project Data

Business Plan

View Investor message and details

Introduction

Projects

Programs

Data Room

Portfolios

Status

Draft

Draft

Submitted to Program

RFQs

Submitted



Interconnected Mini-Grid Acceleration Scheme (IMAS)

Help ?

Portfolios

Portfolios Investor Profiles

Odyssey Energy Solutions-Finance

https://oes-dt-ui-dev-dt-2320homergridcomponent.cfapps.io/#/oes/finance

To create a new portfolio, add projects from the Projects Page

IMAS Lot 1 Submission

REA Nigeria

Project Group 3

Project Group 2

Portfolio Name

•••

•••

...







Home Projects

Programs

Portfolios

RFQs

Hunter Dudley 🕶

Portfolio Actions -



MAS submission

Overview

Introduction

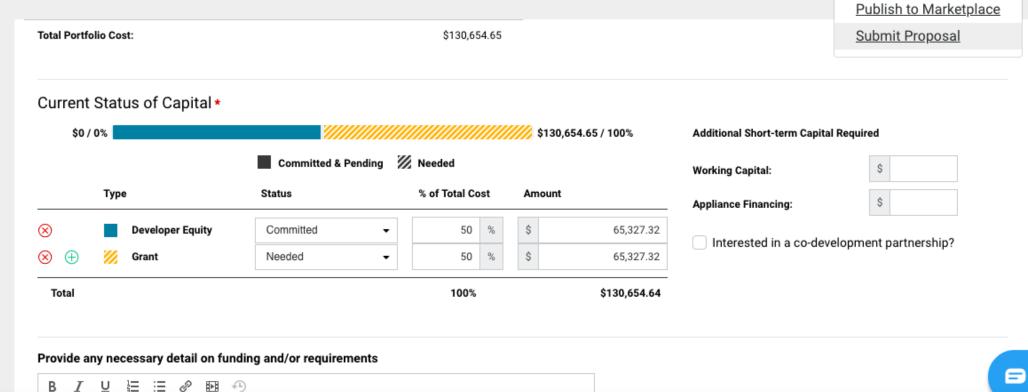
Business Plan

Project Data

Data Room

Define your Introduction

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Projects

Programs

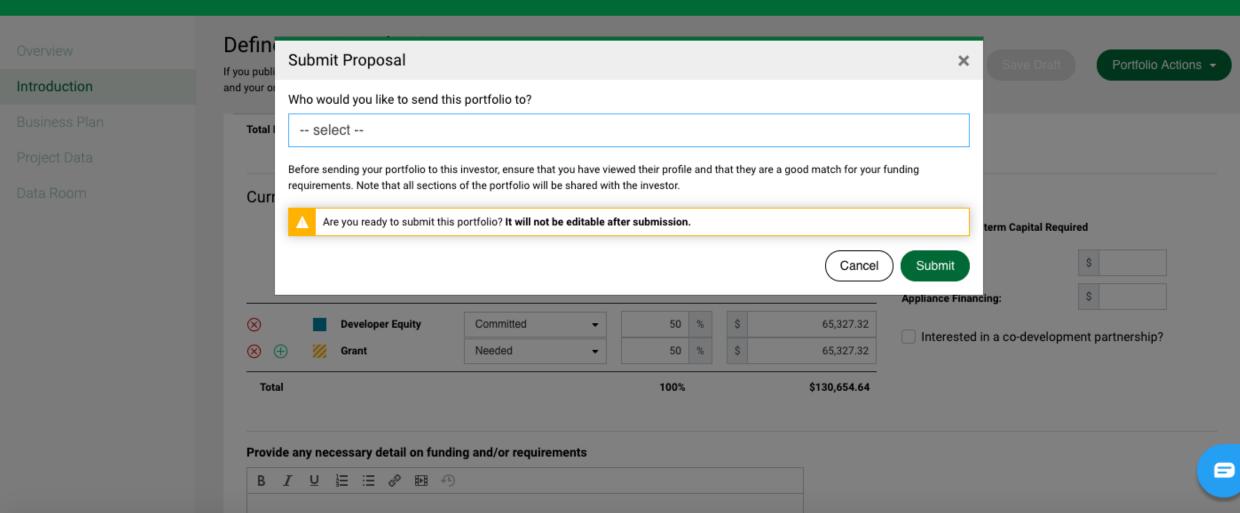
Portfolios

RFQs

Hunter Dudley 🔻

Help ?

MAS submission









Projects

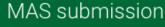
Programs

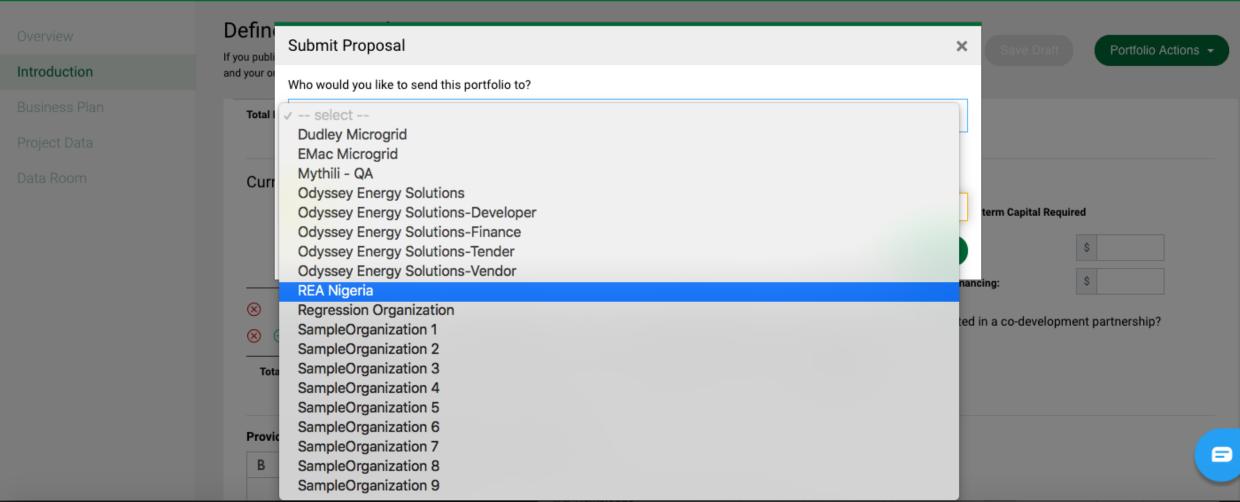
Portfolios

RFQs

Hunter Dudley ▼

Help (2)











Projects

Programs

Portfolios

RFQs

Hunter Dudley ▼

Help ?

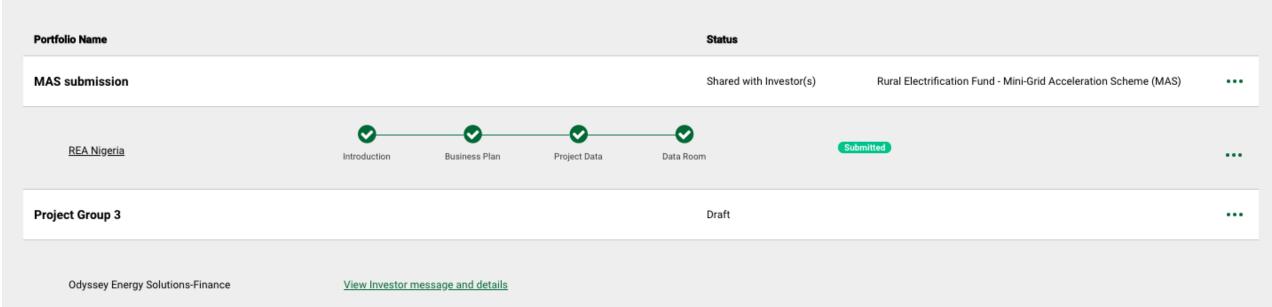
Portfolios

Project Group 2

Portfolios

Investor Profiles

To create a new portfolio, add projects from the Projects Page



Draft







Projects

Programs

Draft

Portfolios

RFQs

Hunter Dudley 🕶

Help ?

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Project Group 2

Portfolios

Investor Profiles

To create a new portfolio, add projects from the Projects Page

