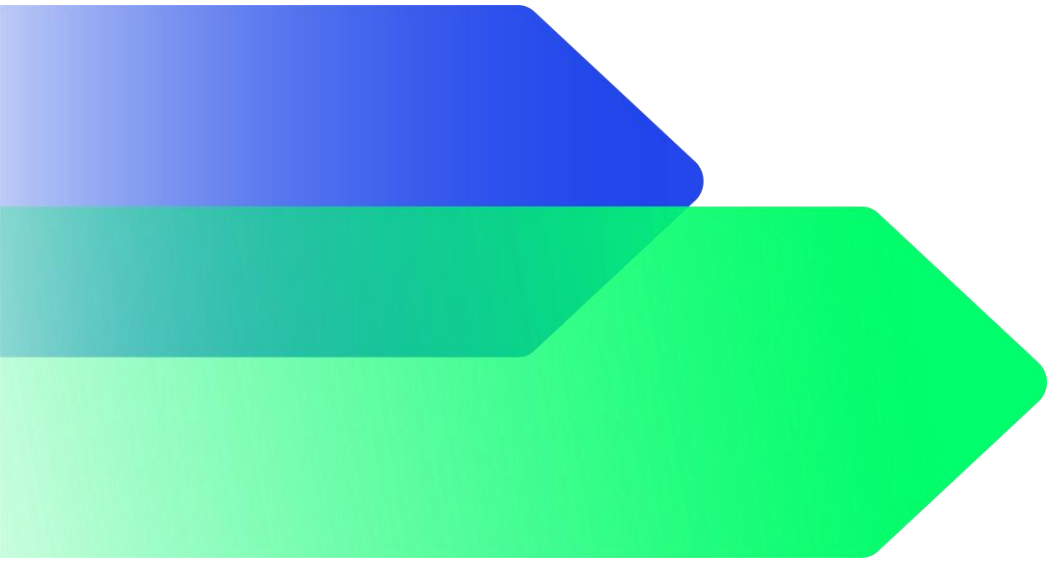
PUBLIC INVESTMENT FUND

Green Bond Impact Assessment

For eligible green uses of proceeds under the PIF Green Bond Framework

September 2023



The Carbon Trust's mission is to accelerate the move to a decarbonised future.

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Abbreviations

BEVs	Battery Electric Vehicles
CCE	Circular Carbon Economy
DCS	District Cooling Systems
GBP	Green Bond Principles
GHG	Greenhouse Gas Emissions
GLP	Green Loan Principles
HVAC	Heating, Ventilation and Air Conditioning
ICE	Internal Combustion Engines
IFI	International Financial Institutions Working Group on Greenhouse Gas Accounting
LED	Light Emitting Diodes
PCAF	Partnership for Carbon Accounting Financials
PIF	Public Investment Fund
RE	Renewable Energy
SDG	Sustainable Development Goals

Introduction

PIF Green Bond Overview

Aligned with its strategy, Public Investment Fund ("**PIF**") has issued and is intending to continue issuing green bonds, sukuk, loans and other debt instruments to finance and/or refinance projects that meet the requirements as described in the PIF Green Finance Framework ("**Framework**")[1]. The objective of the Framework, and subsequent green bonds issued from it, is to fund projects or assets that mitigate climate change by reducing emissions, protecting ecosystems or otherwise having a positive environmental impact. To date, PIF has issued 6 green bonds under the Framework amounting to USD 8.5 billion – USD 3.0 billion in October 2022; and USD 5.5 billion in February 2023.

The implementation of the Framework is intended to contribute materially to Saudi Arabia's Net Zero by 2060 commitment which has a focus on the G20-endorsed concept of the circular carbon economy ("**CCE**")[2]. Based on the CCE approach, eligible green projects are classified according to their management of emissions:

- **Emissions Reduction** – contribution to climate action through avoidance of Greenhouse Gas emissions ("**GHG**");
- **Emissions Reuse or Recycle** – contribution to climate action through abatement by capturing emissions and undertaking any of the following actions:
    i. reuse of emissions without changing their chemistry;
    ii. recycling of emissions, or products containing GHG emissions, into similar or different products with different chemical characteristics; and,
    iii. storage of GHG emissions; and,
- **Emissions Removal** – contribution to climate action through the removal of GHG emissions from the atmosphere via nature-based solutions or carbon removal technologies.

The Framework focuses primarily on Emissions Reduction and will contribute to achieving both Saudi Arabia's objectives of implementing the CCE concept. It will also contribute towards a number of United Nations Sustainable Development Goals ("**SDGs**"): Clean Water & Sanitation (SDG 6); Affordable & Clean Energy (SDG 7); Sustainable Cities & Communities (SDG 11); Responsible Consumption & Production (SDG 12); and, Life on Land (SDG 15).

PIF, at its discretion but in accordance with the Green Bond Principles ("**GBP**") and Green Loan Principles (**"GLP"**), has allocated the net proceeds of the green bonds it issues to an eligible portfolio of new and existing green projects ("**Green Assets Register**"). The allocation of proceeds has received assurance from Deloitte. Projects in the Green Assets Register are financed and/or refinanced in whole or in part by an allocation of the bond proceeds. The eligible green project categories that are included within the Framework can be seen in Figure 1, below.

1 PIF Green Finance Framework (Feb 2022)
2 Saudi Arabia CCE Concept Note (Jul 2021)

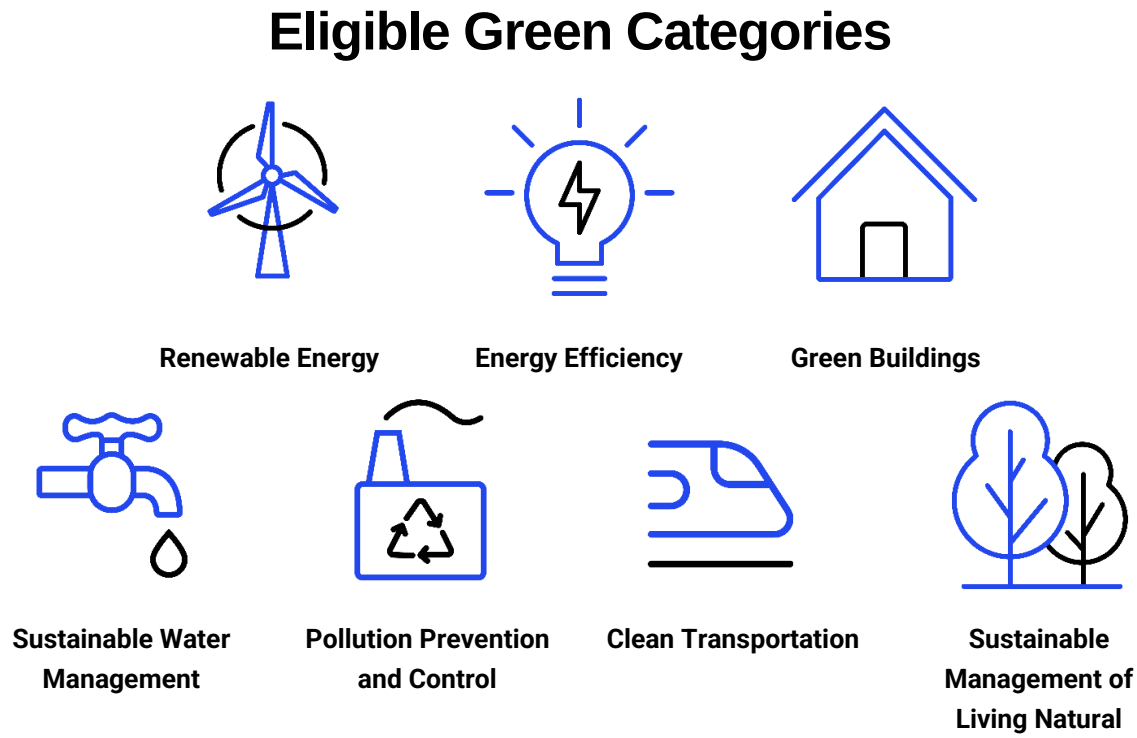

Figure 1: Currently Available Green Eligible Asset Categories

The Framework is aligned with the International Capital Market Association's ("**ICMA**") Green Bond Principles (June 2021), and Loan Market Association Green Loan Principles (February 2021). The Framework has additionally received an independent Second Party Opinion from DNV.

The GBP and GLP are a set of voluntary guidelines, updated periodically, that recommend transparency and disclosure, as well as promote integrity in the development of the green bond, and loan, market by clarifying the approach for issuing a green bond or loan. The Framework, therefore, has four key components, which PIF asserts that it will adopt for each green bond or loan issued under it:

1. Use of Proceeds,
2. Process for Project Evaluation and Selection,
3. Management of Proceeds, and,
4. Reporting.

Vision 2030

As part of Saudi Arabia's Vision 2030 strategy, Saudi Arabia launched 'The Saudi Green Initiative' and founded and leads 'The Middle East Green Initiative'. The Saudi Green Initiative sets out 8 targets to help combat climate change. PIF's green finance framework and associated issuances aims to significantly contribute to the Saudi Green Initiative targets, and more specifically:

- Achieving Net Zero emissions by 2060[3];
- Reducing carbon emissions by more than 278 mtpa by 2030;
- Increasing domestic generation capacity from Renewable Energy to 50% by 2030; and,
- Planting 450 million trees and rehabilitate 8 million hectares of degraded land by 2030.

3 PIF is supporting Saudi Arabia's 2060 net zero target and PIF's own commitment to net zero by 2050.

Reporting Principles

Reporting of the environmental impacts of green bonds is evolving and is a relatively new concept. However, PIF is committed to reporting on the method used to calculate the avoided GHG emissions for its Green Finance Framework based on:

- Climate Bonds Standard V3.0 (December 2019);[4]
- Green Bond Principles (June 2021);[5]
- Green Loan Principles (February 2021);[6]
- ICMA Harmonised Framework for Impact Reporting (June 2023);[7]
- IFI GHG Accounting for Grid Connected Renewable Energy Projects (July 2019)[8]; and,
- PCAF Global GHG Accounting and Reporting Standard for the Financial Industry (December 2022), Part A, Chapter 5.3, Project Finance.[9]

PIF follows the key recommendations outlined in the GBP and GLP, with external reviewers engaged throughout their reporting process. In addition, PIF is committed to reporting greenhouse gas emissions in accordance with the five principles contained within the Greenhouse Gas Protocol, namely: relevance; completeness; consistency; transparency; and accuracy. In accordance with the principles of reporting described above, PIF has committed to transparent disclosure of any assumptions and/or estimations used in the calculations contained within its reporting framework.

Scope of Calculations and Reporting

PIF through this assessment reports the expected or actual quantitative environmental impact of the green projects it finances or co-finances through its green bond issuances. The reporting includes the reduction or avoidance of scope 1 and 2 greenhouse gases estimated to have occurred from green projects. PIF also evaluates other indicators that are appropriate to report for environmental impact and performance, such as energy generation figures by type.

PIF undertakes to report the environmental impact of projects it finances or co-finances through its green bonds based, where possible, on the actual environmental performance of the asset. Where this is not possible, expected performance is used. The reporting includes both green indicators and resulting emissions reductions or avoidance, both of which require assumptions and calculations. The reporting is based on the net benefit resulting from the asset in a given period of operation, rather than the gross emissions change before or after the life of the asset or project.

Calculations include project-by-project impacts, as well as aggregated results across the portfolio of assets financed or refinanced with the proceeds of PIF's green bonds. Environmental indicators are attributed to PIF on a project-by-project basis, based on the current percentage share financed (where applicable) and deployed by PIF. The reporting is undertaken on an annual basis, beginning in 2023 one year after PIF's debut green bond issuance, and the assessment will cover a 12-month period and

4 Climate Bonds Standard V3.0 (December 2019) | Climate Bonds Initiative
5 Green Bond Principles (June 2021) | ICMA
6 Green Loan Principles (February 2021) | LMA/LSTA/APLMA
7 Handbook Harmonised framework for impact reporting (June 2023) | ICMA
8 Renewable Energy GHG accounting approach.pdf (unfccc.int)
9 The Global GHG Accounting and Reporting Standard for the Financial Industry (Dec 2022) | PCAF

consider any dynamic changes in the assets financed or refinanced that occur from one reporting period to another. In accordance with the principles of reporting described above, PIF has and continues to commit to transparent disclosure of any assumptions and estimations used in the calculations contained within its reporting framework.

Avoided Emissions

Avoided emissions form a core component of the impact assessment. Measuring them provides insight into the wider positive impact in the form of GHG emissions avoided as a result of the solutions deployed in comparison to a baseline reference scenario. Existing as a subsection of avoided emissions, this assessment will also consider the enablement from a solution (product/service) and whether that allows for the same or similar function to be performed with significantly less GHG emissions. By providing these solutions, companies enable avoided emissions in the wider system, outside of their value chain. Avoided emissions, along with the entire impact assessment will be calculated on a year-by-year basis.

At the core of the avoided emissions assessment, is the reference scenario. The reference scenario looks to establish the context of the deployed proceeds and what is directly being replaced/reduced as a result of financing activities. The reference scenario must be a credible counterfactual to reflect the reality of the region. Where avoided emissions are calculated, the reference scenario will be described in each of the relevant sector methodology sections. This is summarised in the graph and equation below:

$$\textbf{\textit{Avoided emissions}} = \sum \textit{Reference Scenario Emissions} - \textit{Solution Emissions}$$

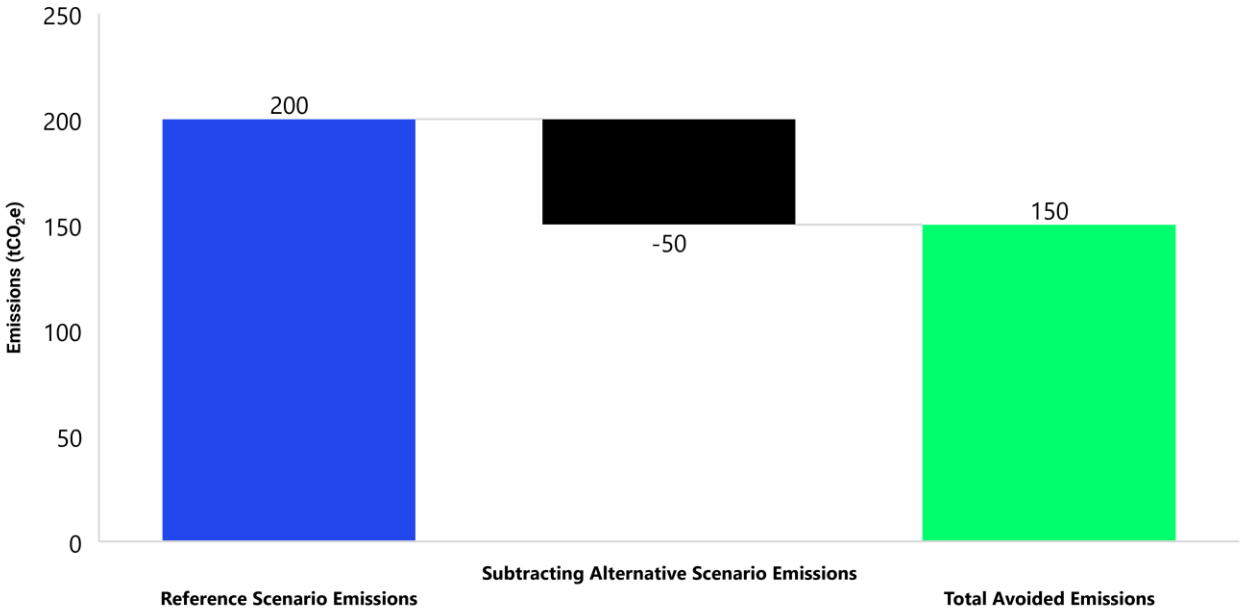

Figure 2: Example of Avoided Emissions Calculation

PIF Financed Emissions and Attribution

When carrying out the impact assessment, an attribution factor is applied to all assets in line with the Partnership for Carbon Accounting Financials ("**PCAF**") methodologies. This helps understand the share of PIF's exposure relative to the impact of the project. In the case of deployment made via PIF subsidiaries and owned entities, including joint ventures entered into by subsidiaries, only the issuer's share of the deployment will be applicable as an allocation to the eligible projects.

This is summarised in the equation below:

$$\textbf{\textit{Financed Emissions}} = Attribution\ Factor \times Project\ Emissions$$

In the process of considering capital for allocation under the green financing instruments, PIF will discount the portion of the Eligible Green Projects that have been deployed by one or several other issuers (i.e., PIF subsidiaries and owned entities, including joint ventures entered into by its subsidiaries). By deploying capital in projects through equity, PIF is gaining a permanent attribution.

The calculation of the attribution factor is split into three options. Firstly, where PIF is the sole financier, owning or financing 100% of a project that is operational, then 100% attribution is used. This is because the project is fully operational and PIF benefits from full attribution of the emissions and impact.

The second option applies to projects that are operational or under construction, and where PIF is not the sole financier (i.e., attribution is less than 100%). If a project fits this description, then the cumulative deployed amount up until the reporting year will be applied as the 'PIF Deployed Amount'. This is to represent capital drawdowns and PIF's portion of the capital across multiple parties.

This is summarised in the equation below:

$$\textbf{\textit{Attribution Factor}} = \frac{PIF\ Deployed\ Amount}{Total\ Project\ Finance}$$

The third option applies if the project is entirely under construction, and where PIF is the sole financier. Under these conditions, PIF's total deployment at origination will be used as the numerator. This is being applied as the assessment will look to understand the expected impact once operational and as such PIF will obtain full attribution of forward-looking impact.[10]

This is summarised in the equation below:

$$\textbf{\textit{Attribution Factor}} = \frac{PIF\ Investment\ Amount\ at\ Origination}{Total\ Project\ Finance}$$

Across both the second and third options, the 'Total Project Finance' of each equation is limited to the total CAPEX of the respective projects. This is to aim to keep the denominator consistent across the entire tenor of the bond for future assessments.

10 It is important to note that if the ownership structure changes, the calculation will shift to the first option.

Impact of the Green Bonds and Eligible Green Assets Register

Summary of projects and allocation

As of June 30, 2023[11], 1.3 billion USD has been deployed from the 8.5 billion USD issued across the October 2022 and February 2023 Issuances. As seen in Table 1, the deployed amount has contributed to 35 eligible green projects across 7 green sectors. Also disclosed by PIF is the Currently Available Green Eligible CAPEX amount of 11.7 billion USD. This value highlights the targeted pipeline of Eligible Green Projects that PIF will deploy capital into. This assessment will look at the impact of both the Deployed Amount, as well as the Eligible Green Pipeline.

Table 1: Summary of Allocation

	Deployed Amount		Total Currently Available Green Eligible Assets CAPEX Amount	
Eligible Categories	**Number of Eligible Projects**	**Deployed Amount (mn USD)**	**Number of Eligible Projects**	**Total Green CAPEX Amount (mn USD)**
Renewable Energy	6	88	8	2,891
Energy Efficiency	10	248	13	514
Green Buildings	8	874	11	4,572
Clean Transportation	3	31	15	2,835
Sustainable Water Management	4	90	7	386
Pollution Prevention and Control	1	0[12]	2	213
Sustainable management of living natural resources and land use	3	3	3	255
Total	**35**	**1,335**	**59**	**11,667**

11 This cut-off includes projects within the lookback period as stated in the Framework.
12 The corresponding amount is 0.3 million USD.

PIF Green Bond Impact Highlights

- In line with the **PIF Green Finance Framework**, PIF has issued **six green bonds under the Framework amounting to a total of USD 8.5 billion:**
  - **USD 3.0 billion in October 2022,**
  - **USD 5.5 billion in February 2023.**
- From the total **1.3 billion USD Deployed Amount, 9 of the 35 projects are currently or partially operational** and the remaining **26 are still within either design stage or under construction**.

8 Green Building projects have received financing, resulting in savings of 157,000 MWh per year.

c. 128 thousand energy efficiency bulbs are being installed across Saudi Arabia saving 4.7 million MWh per year.

c. 6,000 Energy Efficient HVAC systems are being installed across Saudi Arabia saving 15,000 MWh per year.

Attributed Green Hydrogen and Ammonia Production reduce emissions by 28,000 tCO_2e per year.

Attributed desalinated water will be enough to supply 12,300 people per year.[46]

Attributed Charging Infrastructure is expected to charge around 1,800 electric vehicles per year.[47]

Deployed Amount (USD) 1.3 billion	**Green Issuance Amount (USD)** 8.5 billion
Number of Eligible Categories 7	**Number of Eligible Projects** 35
Expected Avoided Energy (MWh) 5.6 million	**Expected Avoided Emissions (tCO_2e)[13]** 3.5 million
Expected Wastewater Treated (m^3) 23.2 million	**Expected Sea Water Desalinised (m^3)** 1.2 million

13 Due to data availability and reliability challenges, Scope 3 emissions were excluded from the assessment. These emissions will be incorporated as data quality and availability improves in future periods.

Table 2: Summary of the Impact of PIF's Deployed Amount – October 2022 and February 2023 Issuances

			October 2022 Issuance			February 2023 Issuance		
Category	**Number of Eligible Projects**	**Total Deployed Amount (mn USD)**	**Deployed Amount (mn USD)**	**Attributed Avoided Energy (MWh)**	**Attributed Avoided Emissions (tCO_2e)**	**Deployed Amount (mn USD)**	**Attributed Avoided Energy (MWh)**	**Attributed Avoided Emissions (tCO_2e)**
Renewable Energy	**6**	**88**	**47**	**-**	**14,814**	**41**	**-**	**13,068**
Wind and Solar PV	-	-	-	-	-	-	-	-
Renewable Energy Measuring Device	1	3	2	-	-	1	-	-
Solar PV Thermal Water[14]	4	10	5	-	5	5	-	4
Hydrogen	1	75	40	-	14,809	35	-	13,064
Energy Efficiency	**10**	**248**	**138**	**2,625,221**	**1,619,499**	**110**	**2,083,880**	**1,285,546**
Street lighting	6	182	102	2,616,882	1,614,354	81	2,077,261	1,281,462
HVAC System	4	65	36	8,339	5,144	29	6,620	4,084
District Cooling	-	-	-	-	-	-	-	-
Smart Metering	-	-	-	-	-	-	-	-
Green Buildings	**8**	**874**	**459**	**82,254**	**50,743**	**416**	**74,554**	**45,992**
Commercial Real Estate	8	874	459	82,254	50,743	416	74,554	45,992
Clean Transportation	**3**	**31**	**16**	**347,792**	**214,569**	**16**	**347,792**	**214,569**
Public Electric Vehicles	-	-	-	-	-	-	-	-
Individual Electric Vehicles	1	11	5	-	17	5	-	17
Charging Infrastructure	2	20	10	347,792	214,553	10	347,792	214,553
Sustainable Water Management	**4**	**90**	**45**	**3,735**	**2,304**	**45**	**3,735**	**2,304**
Water Treatment	3	79	39	-	-	39	-	-
Desalinisation	1	12	6	3,735	2,304	6	3,735	2,304
Pollution Prevention and Control	**1**	**0**	**0**	**-**	**-**	**0**	**-**	**-**
Sewage Treatment	1	0	0	-	-	0	-	-
Sustainable management of living natural resources and land use	**3**	**3**	**2**	**-**	**-**	**2**	**-**	**-**
Living Natural Resources and Land Use Projects	3	3	2	-	-	2	-	-
Total	**35**	**1,335**	**706**	**3,059,002**	**1,901,928**	**629**	**2,509,961**	**1,561,480**

14 Electricity Production was not included in this table as the only asset that had attributed Energy Production was Solar PV Thermal Water. The October 2022 issuance produced the equivalent of 7.97 MWh and February 2023 issuance produced the equivalent of 7.03 MWh.

PIF Green Pipeline Impact Highlights

- In line with the **PIF Green Finance Framework**, PIF has earmarked a total **Currently Available Green Eligible Assets CAPEX Amount of 11.7 billion USD.**
- As a result of the **11.7 billion Green Eligible Projects Pipeline Amount, 59 projects** will eventually receive funding, covering all 7 eligible categories. **10 of the 59 are currently or partially operational** and the remaining **49 are still within either design stage or under construction**.

Once operational, the 11 Green Building projects will result in savings of 711 thousand MWh per year.

c. 211 thousand energy efficiency bulbs are being installed across Saudi Arabia saving 7.7 million MWh per year.

c. 6,000 Energy Efficient HVAC systems are being installed across Saudi Arabia saving 15 thousand MWh per year.

Attributed Renewable Energy Production will be enough to power 160 thousand homes per year.[48]

Attributed desalinated water will be enough to supply 12,300 people per year.[46]

Attributed Charging Infrastructure is expected to charge around 8,200 electric vehicles per year.[47]

Deployed Amount (USD) 1.3 billion	**Green Eligible Pipeline Amount (USD)** 11.7 billion
Number of Eligible Categories 7	**Number of Eligible Pipeline Projects** 59
Expected Avoided Energy (MWh) 11.9 million	**Expected Avoided Emissions (tCO_2e)[15]** 10.6 million
Expected Wastewater Treated (m^3) 49.4 million	**Expected Sea Water Desalinised (m^3)** 1.2 million

15 See 13 above

Table 3: Summary of the Impact of PIF's Eligible Pipeline Portfolio – Total Amount of Operational and Under Construction Projects

Category	Number of Eligible Projects[16]	Eligible Portfolio (mn USD)	Deployed Amount (mn USD)	Attributed Capacity (MWe)	Attributed Production (MWh)	Attributed Avoided Energy (MWh)	Attributed Avoided Emissions (tCO_2e)
Renewable Energy	**8**	**2,891**	**88**	**2,000**	**5,467,495**	**-**	**3,268,486**
Wind and Solar PV	2	2,105	-	2,000	5,467,480	-	3,240,604
Renewable Energy Measuring Device	1	9	3	-	-	-	-
Solar PV Thermal Water	4	10	10	-	15	-	9
Hydrogen	1	767	75	-	-	-	27,873
Energy Efficiency	**13**	**514**	**248**	**-**	**-**	**7,761,593**	**4,788,127**
Street lighting	7	300	182	-	-	7,746,587	4,778,869
HVAC System	4	65	65	-	-	14,959	9,228
District Cooling	1	145	-	-	-	47	29
Smart Metering	1	4	-	-	-	-	-
Green Buildings	**11**	**4,572**	**874**	**-**	**-**	**710,575**	**438,354**
Commercial Real Estate	11	4,572	874	-	-	710,575	438,354
Clean Transportation	**15**	**2,835**	**31**	**-**	**-**	**3,467,552**	**2,139,197**
Public Electric Vehicles	5	2,726	-	-	-	-	-
Individual Electric Vehicles	2	17	11	-	-	-	64
Charging Infrastructure	8	92	20	-	-	3,467,552	2,139,133
Sustainable Water Management	**7**	**386**	**90**	**-**	**-**	**7,469**	**4,608**
Water Treatment	6	225	79	-	-	-	-
Desalinisation	1	161	12	-	-	7,469	4,608
Pollution Prevention and Control	**2**	**213**	**0**	**-**	**-**	**-**	**-**
Sewage Treatment	2	213	0	-	-	-	-
Sustainable management of living natural resources and land use	**3**	**255**	**3**	**-**	**-**	**-**	**-**
Living Natural Resources and Land Use Projects	3	255	3	-	-	-	-
Total	**59**	**11,667**	**1,335**	**2,000**	**5,467,495**	**11,947,189**	**10,638,771**

16 "Operational" projects refer to those projects that are already in operation and delivering real-time impact. "Under Construction" projects are those that are still in the development and/or construction phase and have not yet become operational, therefore their impact is forward-looking.

Table 4: Summary of the Impact of PIF's Eligible Pipeline Portfolio – Total Amount of Operational Projects

Category	Number of Eligible Projects[17]	Eligible Portfolio (mn USD)	Deployed Amount (mn USD)	Attributed Capacity (MWe)	Attributed Production (MWh)	Attributed Avoided Energy (MWh)	Attributed Avoided Emissions (tCO_2e)
Renewable Energy	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Wind and Solar PV	-	-	-	-	-	-	-
Renewable Energy Measuring Device	-	-	-	-	-	-	-
Solar PV Thermal Water	-	-	-	-	-	-	-
Hydrogen	-	-	-	-	-	-	-
Energy Efficiency	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Street lighting	-	-	-	-	-	-	-
HVAC System	-	-	-	-	-	-	-
District Cooling	-	-	-	-	-	-	-
Smart Metering	-	-	-	-	-	-	-
Green Buildings	**5**	**141**	**141**	**-**	**-**	**28,048**	**17,303**
Commercial Real Estate	5	141	141	-	-	28,048	17,303
Clean Transportation	**4**	**42**	**31**	**-**	**-**	**695,584**	**429,170**
Public Electric Vehicles	-	-	-	-	-	-	-
Individual Electric Vehicles	2	17	11	-	-	-	64
Charging Infrastructure	2	25	20	-	-	695,584	429,106
Sustainable Water Management	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Water Treatment	-	-	-	-	-	-	-
Desalinisation	-	-	-	-	-	-	-
Pollution Prevention and Control	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sewage Treatment	-	-	-	-	-	-	-
Sustainable management of living natural resources and land use	**1**	**0**	**0**	**-**	**-**	**-**	**-**
Living Natural Resources and Land Use Projects	1	0	0	-	-	-	-
Total	**10**	**183**	**172**	**-**	**-**	**723,632**	**446,473**

17 See 16 above

Table 5: Summary of the Impact of PIF's Eligible Pipeline Portfolio – Total Amount of Under Construction Projects

Category	Number of Eligible Projects[18]	Eligible Portfolio (mn USD)	Deployed Amount (mn USD)	Attributed Capacity (MWe)	Attributed Production (MWh)	Attributed Avoided Energy (MWh)	Attributed Avoided Emissions (tCO_2e)
Renewable Energy	**8**	**2,891**	**88**	**2,000**	**5,467,495**	**-**	**3,268,486**
Wind and Solar PV	2	2,105	-	2,000	5,467,480	-	3,240,604
Renewable Energy Measuring Device	1	9	3	-	-	-	-
Solar PV Thermal Water	4	10	10	-	15	-	9
Hydrogen	1	767	75	-	-	-	27,873
Energy Efficiency	**13**	**514**	**248**	**-**	**-**	**7,761,593**	**4,788,127**
Street lighting	7	300	182	-	-	7,746,587	4,778,869
HVAC System	4	65	65	-	-	14,959	9,228
District Cooling	1	145	-	-	-	47	29
Smart Metering	1	4	-	-	-	-	-
Green Buildings	**6**	**4,432**	**734**	**-**	**-**	**682,527**	**421,051**
Commercial Real Estate	6	4,432	734	-	-	682,527	421,051
Clean Transportation	**11**	**2,793**	**-**	**-**	**-**	**2,771,968**	**1,710,027**
Public Electric Vehicles	5	2,726	-	-	-	-	-
Individual Electric Vehicles	-	-	-	-	-	-	-
Charging Infrastructure	6	67	-	-	-	2,771,968	1,710,027
Sustainable Water Management	**7**	**386**	**90**	**-**	**-**	**7,469**	**4,608**
Water Treatment	6	225	79	-	-	-	-
Desalinisation	1	161	12	-	-	7,469	4,608
Pollution Prevention and Control	**2**	**213**	**0**	**-**	**-**	**-**	**-**
Sewage Treatment	2	213	0	-	-	-	-
Sustainable management of living natural resources and land use	**2**	**255**	**3**	**-**	**-**	**-**	**-**
Living Natural Resources and Land Use Projects	2	255	3	-	-	-	-
Total	**49**	**11,484**	**1,164**	**2,000**	**5,467,495**	**11,223,557**	**10,192,298**

18 See 16 above

Sector Breakdown of Eligible Green Asset Register

The following section will present the results of the impact assessment on a category-by-category basis, covering all projects included in the 11.7 billion USD Green Eligible Assets Pipeline CAPEX Amount. All results are provided as the attributed value, along with a qualitative description of the impact. All results presented below include the actual and/or expected scope 1 and 2 emissions for both operational and under-construction projects.

In line with the Framework, the Sector Breakdown will focus on the environmental impact of the projects, however, where applicable, the wider social benefits associated with the projects will also be touched upon.

Renewable Energy

In 2020, the Saudi Arabian grid consisted of over 99% fossil fuels highlighting that Saudi Arabia has been falling behind global averages in Renewable Energy ("**RE**"), with <1% of total generation from Solar PV in 2020, compared to the global average of 9%.[19]

In 2020, 79% of the country's emissions (including energy used in transportation and construction), were coming from fossil fuel sources [20]. To counter this, Saudi Arabia's Paris Agreement pledge aims for 50% of electricity to be generated from RE by 2030 with the remaining 50% from natural gas, as confirmed by Saudi Arabia's Vision 2030 (Oct. 2021).

More investment into RE for Saudi Arabia, will not only be accompanied by job creation, and upskilling of existing workers, but a study by IRENA found that modern renewable sectors were comprised of 35% women, far higher than the energy sector average.[21]

Solar PV and Wind Energy Impact

As of 2020, Saudi Arabia had no Wind Power and 779 GWh of Solar PV.[18] To further address this and action their Vision 2030 target, PIF has raised finance for two RE projects with a combined capacity of 2,000 MWe.

PIF has earmarked proceeds of a Solar PV project and Wind Farm which are expected to become operational in 2025/2026. This will increase the RE generation for the country by 7x to a total local generation of 6,246 GWh, which would increase the share of electricity generated from RE to 2%, up from 0.03%.

Number of Projects:	2
Relevant Project Locations:	Saudi Arabia
Capacity of Renewable Energy Plants (MWe):	2,000
Attributed Annual Renewable Energy Generation (MWh):	5,467,480
Attributed Annual Avoided Emissions (tCO_2e):	3,240,604

Solar Thermal Energy Impact

As previously discussed, with Saudi Arabia's electricity generation being almost entirely reliant on fossil fuels, PIF has financed the installation of Solar Thermal technology which

19 Renewables – Global Energy Review 2020 – Analysis - IEA
20 Saudi Arabia Climate Change Data – Emissions and Policies | Climate Watch
21 Renewable energy benefits: Understanding the socio-economics (irena.org)

for this assessment is eligible under the categorisation as a Solar Project under the Framework.

These projects are expected to carry the entire water load required for properties across several localities in Saudi Arabia. Acting as a direct replacement for grid connected electricity powered boilers. The projects will increase heating efficiency, reduce reliance on fossil fuels and mitigate energy consumption in a solar efficient country.

Number of Projects:	4
Relevant Project Locations:	Saudi Arabia
Estimated number of Solar Thermal Systems Installed[22]:	6,042
Attributed Annual Solar Thermal Energy Generation (MWh):	15.2
Attributed Annual Avoided Emissions (tCO_2e):	9.4

Renewable Energy Measuring Devices Impact

To accompany the Solar PV and Wind Energy projects, PIF has also funded RE Measuring devices. While there is no quantifiable impact as a result of this project, there is an important enabling element in their roll-out. These devices will help ensure the optimisation of RE generation, providing both operational and maintenance benefits to maximise the potential impact of RE generation.

Green Hydrogen Energy Impact

Hydrogen is a key pillar of decarbonising the global energy system, with the potential to help decarbonise hard-to-abate sectors such as long-distance travel and heavy industry.[23] PIF has committed to the development of a Green Hydrogen plant, which, once operational, will produce 219,000 tonnes of green hydrogen per annum or 1.2 million tonnes of green ammonia.

Number of Projects:	1
Relevant Project Locations:	Saudi Arabia
Attributed Capacity of Hydrogen Plant (MW):	34.84
Attributed Annual Hydrogen Generation (t):	1,956.44
Attributed Annual Ammonia Generation (t):	10,720.23
Attributed Annual Avoided Emissions (tCO_2e):	27,872.59

Energy Efficiency

With the residential building sector consuming half of the electricity used in Saudi Arabia,[24] or 38% of the country's emissions in 2020, Saudi Arabia has introduced a number of energy efficiency measures such as insulation standards for new buildings and tightened minimum energy performance standards for Air Conditioning Units ("**ACUs**").

22 Estimated based on information provided by relevant portfolio companies for other eligible categories.
23 Hydrogen | IEA
24 Energy efficiency of residential buildings in the kingdom of Saudi Arabia: Review of status and future roadmap | ScienceDirect

Since their introduction in 2012, the standards for ACUs have been further refined and insulation standards enforced.

Energy Efficiency improvements will also provide societal improvements across Saudi Arabia by reducing utility costs. With a mean temperature of 26.8 degrees and pushing up to almost 42 during peaks in 2021[25], cooling is a necessity to ensure health and wellbeing. As such, PIFs deployments will enable improved access to thermal societal comfort and reduce associated health risks.

District Cooling Impact

Cooling remains a major source of energy consumption across the MENA region. Therefore, a key part of strategies developed for climate action in the region is the greater incorporation of district cooling projects.[26]

PIF is able to take advantage of new developments taking place across Saudi Arabia by installing District Cooling plants alongside the construction of new building units. This offers a more energy efficient solution as opposed to individual ACUs, with the aim of installing cost effective technology that provides particular benefit to the energy intensive hospitality sector.

The installation of District Cooling will further help reduce Saudi Arabia's dependence on fossil fuels, through the potential for the plant to be co-located with RE in the future, while also establishing efficient cooling mechanisms.

Number of Projects:	1
Relevant Project Locations:	Saudi Arabia
Total Refrigerant Production (tr)	80,000
Attributed Annual Energy Savings (MWh):	47.20
Attributed Annual Avoided Emissions (tCO_2e):	29.12

Heating, Ventilation and Air Conditioning Projects Impact

Saudi Arabia has the highest share of ACU in household electricity consumption globally.[27] In 2009, where at the time the building sector was responsible for about 80% of the total energy consumption, 70% of this was a result of the operation of Heating, Ventilation and Air Conditioning ("**HVAC**") systems.[28]

When developing new properties, PIF has ensured the installation of energy efficient HVAC systems. These systems are designed with a co-efficiency of performance ("**COP**") ranging from 3.8 to 4.0 which goes beyond the requirements of ASHRAE and SBC requirements of COP 3.0-3.2. The COP determines the performance rating of the HVAC system and how much output is being produced compared to the energy input.

With the country's dependence on cooling, ensuring minimum standards are not only achieved but exceeded will help further catalyse decarbonisation.

25 Saudi Arabia - Climatology | Climate Change Knowledge Portal (worldbank.org)
26 Cooling in Dubai: A Market Share and Efficiency Study | RSB
27 Transitioning to high efficiency air conditioning in Saudi Arabia: A benefit cost analysis for residential buildings | Journal of Building Engineering
28 Building energy performance simulation: a case study of modelling an existing residential building in Saudi Arabia - IOPscience

Number of Projects:	4
Relevant Project Locations:	Saudi Arabia
Number of HVACs installed:	6,042
Attributed Annual Energy Savings (MWh):	14,958.71
Attributed Annual Avoided Emissions (tCO_2e):	9,228.03

Street Lighting Projects Impact

As a key requirement globally, streetlighting has become an energy intensive service that governments must provide. To provide this service in the most energy efficient way, the 7 green projects will replace existing High Pressure Sodium bulbs and install new light-emitting diode ("**LED**") fixtures.

Within areas of new development, new LED fixtures will be installed. The environmental benefits of LEDs are well established globally, with the technology being the preferred option for energy efficient lighting.

Number of Projects:	7
Relevant Project Locations:	Saudi Arabia
Number of Bulbs Installed[29]:	6,042
Attributed Annual Energy Savings (MWh):	7,746,586.90
Attributed Annual Avoided Emissions (tCO_2e):	4,778,869.46

With such a high reliance on fossil fuels, the installation of LEDs and the associated energy efficiency and energy reduction improvements provide significant savings.

Smart Metering Projects Impact

With, 45% of Saudi Arabia's electricity consumption attributed to residential properties,[30] smart Metering improves habits through better tracking of energy consumption and changes habits towards and access to greener energy when available.

Green Buildings

In 2020, the electricity and heat emissions, coupled with the construction and manufacturing sector accounted for 50% of Saudi Arabia's total emissions (273 $MtCO_2e$ of electricity and heat emissions; construction and manufacturing sector which accounted for 84.21 $MtCO_2e$).

Much of the housing stock in Saudi Arabia currently contains a large amount of energy efficiency defects. One way PIF is looking to address this is through infrastructure changes detailed in the RE and Energy Efficiency sections which will enable all housing units in Saudi Arabia to be powered by less carbon-intensive energy sources and also be more energy efficient with its energy usage.

To then action the construction and operational deficiencies at present, Saudi Arabia introduced the Mostadam Green Building Rating System, aligned with Saudi Arabia's Vision 2030 and the Saudi Green Building Code. Mostadam is a rating system in place to set specific minimum

29 For projects where the number of streetlight installations were not provided, the average cost per project value from was used from other projects to estimate the number of streetlights installed across all eligible projects.
30 Saudi Arabia - Countries & Regions | IEA

performance parameters beyond the existing Saudi Green Building Code ("**SGBC**").[31] PIF is pushing to raise the standard of Saudi Arabia's building stock, and new projects financed by PIF is looking to achieve Mostadam and/or LEED Gold Certification across all properties.

Green Buildings Impact

All 11 new projects financed by PIF have achieved Mostadam and/or LEED Gold Certification across all their properties. This is the best standard that Saudi Arabian buildings can align to, ensuring that regional and international best practices are carried out across the construction and operational life span of the buildings.

Number of Projects:	11
Relevant Project Locations:	Saudi Arabia
Level of Certification Achieved:	Gold and/or Diamond Certification
Attributed Annual Energy Savings (MWh):	710,575.30
Attributed Annual Avoided Emissions (tCO_2e):	438,353.90

Clean Transportation

Accounting for 18% of the country's emissions in 2020, the transportation sector in Saudi Arabia is still growing by 2.8% per year[32]. At present, light-duty vehicles represent 52% of the country's vehicle fleet, while heavy-duty vehicles represent 40%.[32] By deploying capital into Clean Public Transportation, Battery Electric Vehicles ("**BEVs**") and Charging Infrastructure, PIF is looking to reduce the country's reliance on internal combustion engine vehicles ("**ICE**") and further integrate BEVs across the country.

Electric Public Transportation Impact

Across Saudi Arabia, private cars are currently the dominant mode of transport. For example, in Riyadh, 92% of daily trips are at present made by private cars, resulting in high levels of congestion and reduced air quality.[33]

To catalyse the shift in Saudi Arabia's transportation patterns, PIF has contributed to the development of several public transportation infrastructure projects, looking to disincentivize the use of private vehicles. By raising capital for public transportation, PIF is contributing to the roll-out of a total of 57 public BEVs directly replacing ICE alternatives.

Number of Projects:	5
Relevant Project Locations:	Saudi Arabia
Number of Marine Transport Vessels:	8
Number of Electric Coaches:	15
Number of Rolling Stock:	34

Private Battery Electric Vehicles Impact

To contribute to the reduction of direct emissions associated with private vehicles and the wider transportation sector, PIF has

31 Mostadam Rating System - Commercial Buildings D+C Manual | Mostadam
32 How to Mitigate Transportation Emissions in Saudi Arabia? The Role of Energy Price Governance | KAPSARC
33 Modelling the Modal Shift towards a More Sustainable Transport by Stated Preference in Riyadh, Saudi Arabia | MDPI

introduced 211 BEVs. Despite the lack of direct emissions, due to the high emissions intensity of the grid, the benefits associated with BEVs are currently not as pronounced compared to less carbon intensive grids.

However, as the overall grid decarbonises, in alignment with the commitments described under Saudi Vision 2030, the benefit associated with BEVs will increase as these are powered and charged using electricity from RE.

Number of Projects:	2
Relevant Project Locations:	Saudi Arabia
Number of Individual Vehicles:	211
Attributed Annual Energy Consumption (MWh):	924.67
Attributed Annual Avoided Emissions (tCO_2e):	64.06

EV Charging Infrastructure Impact

Coupled with benefits associated with the increase in BEVs in Saudi Arabia, to further encourage private investment and change societal habits, PIF has deployed proceeds in the development of 684 charging stations across two projects.

As previously mentioned, due to the high carbon intensity of the Saudi Arabia grid at present, the comparative benefit to an ICE vehicle is limited. However, to counter this, PIF has co-located all charging stations with Solar PV to reduce the reliance on the grid. In addition, and as already mentioned, as the overall grid decarbonises, in alignment with the commitments described under RE Impacts above, the benefits of more charging infrastructure will increase as the grid decarbonises.

Number of Projects:	8
Relevant Project Locations:	Saudi Arabia
Estimated Number of Charging Stations:	684
Attributed Annual Avoided Energy (MWh):	3,467,551.91
Attributed Annual Avoided Emissions (tCO_2e):	2,139,333.77

Sustainable Water Management

Saudi Arabia is one of the most water-stressed countries in the world, with water scarcity considered High risk,[34] making clean water one of the main targets for the country's Vision 2030.[35 & 36] Due to the increasing demand for potable water and wastewater infrastructure in the country, the development of the water sector will play a key role in ensuring these needs can be met.[37]

Recycling Plants Impact

Through raising finance in recycling plants, PIF acknowledges the importance of managing water risk and waste pollution in the country.

The eligible projects currently included in this category are for water recycling, which is key for reducing the number of pollutants and

34 WWF Risk Filter Suite | WWF
35 Addressing Water security in arid and water stressed in KSA | UN SDGs
36 Vision 2030 | Kingdom of Saudi Arabia
37 Saudi Arabia - Country Commercial Guide | International Trade Administration

harmful chemicals used in the industrial sector entering the waterways. It is also expected that 1 of the projects will be powered by RE.

Number of Projects:	6
Relevant Project Locations:	Saudi Arabia
Attributed Annual Wastewater Collected (m^3):	43,717,083
Attributed Annual Wastewater Treated (m^3)	42,257,083
Attributed Biosolids Treated (kt)	11,680

Desalinisation Plants Impact

Climate change is resulting in longer and more frequent droughts on the MENA region, which has resulted in the increasing use of desalination in Saudi Arabia through the years. The majority of desalination plants in the world are concentrated in 4 MENA countries, including Saudi Arabia.[38]

Considering around 70% of Saudi Arabia's water comes from desalination plants and it is an energy intensive process,[39] the project aims to be more energy efficient by being powered 100% by RE. The avoided emissions and energy reductions were calculated against the average energy consumption and emissions from the current supply system in Saudi Arabia. An additional benefit of the project is the brine that will be recovered and further processed.

Number of Projects:	1
Relevant Project Locations:	Saudi Arabia
Attributed Annual Water Treated Output (m^3):	1,185,498
Energy Reduced per m^3 (kWh/m^3)	6.3
Attributed Annual Energy Savings (MWh):	7,469.35
Attributed Annual Avoided Emissions (tCO_2e):	4,607.84

Pollution Prevention and Control

Given the accelerated growth in population and industrialisation across Saudi Arabia, waste management is key for the safeguarding of the country's environment. It is expected that Saudi Arabia will treat 106 million tonnes of waste annually by 2035.[40]

Wastewater Treatment Plants Impact

Wastewater treatment is important to increase both the availability of clean water and in pursuing the aim of protecting the health of various ecosystems. Properly treated wastewater can be a reliable water source for many purposes such as, improving quality of life and socio-economic development within the region, and inculcating environmental protection and health.[41]

38 Peak salt: is the desalination dream over for the Gulf states | The Guardian
39 Arab Center Washington DC
40 Saudi Arabia - Country Commercial Guide | International Trade Administration
41 The role of wastewater treatment in achieving sustainable development goals and sustainability guideline | Energy Nexus

The 2 projects financed by PIF aim to satisfy the demand that will come from municipal and industrial wastewater. One of these projects includes a biosolids treatment plant to manage the sludge from the wastewater process. This plant will treat and recover energy from waste through anaerobic digestion. The remaining solids from this process are expected to become fertiliser, which ultimately closes the loop of the wastewater treatment cycle. All projects will be powered by 100% RE.

Number of Projects:	2
Relevant Project Locations:	Saudi Arabia
Attributed Annual Wastewater Collected (m^3):	9,125,000
Attributed Treated Sewage Effluent (m^3)	7,117,500
Attributed Biosolids Treated (kt)	11.68

Sustainable Management of Living Natural Resources and Land Use

Saudi Arabia is largely made up of desert terrain. The limited naturally occurring groundwater coupled with an arid climate poses significant challenges in agricultural development and overcoming the risk of desertification.[42]

Recognising this problem, Saudi Arabia is focused on fostering sustainable agriculture and investing in sustainable food production and has established the National Centre for Vegetation Cover and Combating Desertification in 2021 as part of its Vision 2030 plans. The government has also announced its aim to plant more than 600 million trees by 2030 and 10 billion trees over the coming decades as part of the Saudi Green Initiative, in efforts to combat desertification.

Alternative Dairy and Meat Production Impact

Traditional farming methods relating to both dairy and meat, have a wide range of environmental challenges and impacts. Deploying capital in alternative dairy and meat processing methods and technologies allows for the continued production of these products while reducing associated GHG emissions and promoting the sustainable use of resources such as water, land, and energy.

Studies have shown that animal-based foods result in 2x the amount of GHG emissions than plant-based emissions[43]. Life cycle assessments have also shown that animal-free dairy products use 65% less energy, 91% less land, and 98% less water compared to traditional dairy products.[44] Similarly, plant-based meat alternatives have been shown to use 47-99% less land and 72-99% less water compared to conventional meat.[45]

The facilities in which the projects are anticipated to operate from aim to be powered by 100% RE, as well as maximise water and energy efficiency. They will also aim to reuse

42 Sustainable Agriculture and Rural Development in the Kingdom of Saudi Arabia: Implications for Agricultural Extension and Education | M. Behnassi et al.
43 Global greenhouse gas emissions from animal-based foods are twice those of plant-based foods | Natural Food
44 A Comparison of Land, Water and Energy Use Between Conventional and Yeast-Derived Dairy Products: An Initial Analysis | University of the West of England
45 Environmental benefits of plant-based meat products | GFI

the majority of material and resources (target of 5% biomass waste only).

Baseline figures such as reduction in agricultural land area used, reduction in emissions, water savings and electricity savings have not yet been calculated for the projects due to their current stage of construction and uncertainty around product mix. Nevertheless, the environmental benefits resulting from the completion of these projects, assuming production output and agricultural land area are in line with estimated figures, are expected to yield energy, land, and water savings like those referenced above, although regional specific considerations for Saudi Arabia may cause variances.

Number of projects	2
Estimated Agriculture Land Area for Production of Alternative Dairy Products (hectares)	5.6
Estimated Annual Output of Alternative Meat Products by 2032 (t)	78,000
Estimated Agriculture Land Area for Production of Alternative Meat Products (hectares)	5.3

Living Natural Resources Impact

Living natural resources are understood in terms of a wide variety of plants, animals and microorganisms in the biosphere, and also in terms of the ecosystem services to which they contribute. The deployment of proceeds into Natural Resources has a myriad of environmental benefits, including the preservation and restoration of biodiversity.

Desertification is the land degradation in arid, semi-arid and dry areas, which includes the degradation of vegetation cover, soil degradation and nutrient depletion, and is a serious environmental concern. With Saudi Arabia being comprised of 98.5% hyper-arid to arid lands, there is a high corresponding risk of desertification for the country. Identified methods to combat desertification include restoration and fertilization of the land, as well as reforestation, among others.[46]

The specific project deployed finance to plant approximately 2,000 Arabic Moringa seedlings to combat desertification. Moringa trees have been known to grow quickly in dry areas, with the presence of long taproots increasing their resistance to drought and increasing the soil quality of the surrounding area.[47]

In addition to the environmental benefits, there was the social benefit of educating the local community. Approximately 200 volunteers from Tabuk University were trained on how to grow and nurture seedlings during the incubation phase of the project. This further developed the local community's knowledge on the importance of local plants, and their contribution to the community's biodiversity and combat of desertification.

Number of projects	1
Number of seedlings planted:	c. 2,000
Number of community volunteers:	c. 200

46 Causes, impacts, extent, and control of desertification | H.A. Ghrefat
47 Moringa - Desertification | Moringa Trees

Appendix 1: Detailed Results

1.1. Snapshot assumptions

- Assuming that an average Saudi Arabian resident consumes 256 litres of water per day or 96,725 per year.[48]
- Assuming that a typical EV consumes 4,310.65 kWh per year.[49]
- Assuming that an average Saudi Arabian residence consumes 33.5 MWh per year.[50]

48 per_capita_water_consumption_in_saudi_regions_en_0.pdf (stats.gov.sa)
49 How much electricity does an electric car use? | EVBox
50 Evaluation of the total exergy and energy consumptions in residential sector in Qassim Region, Saudi Arabia (sciencedirectassets.com)

1.2. Renewable Energy

Project type	Number of Eligible Projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Attributed Capacity (MWe)	Attributed production (MWh)	Attributed avoided emissions (tCO_2e)	Attributed avoided emissions per production ($kgCO_2e/MWh$)
Solar PV	1	-	100%	800.00	2,313,880.00	1,371,448.64	592.71
Wind Farm	1	-	100%	1,200.00	3,153,600.00	1,869,155.02	592.71
Solar Thermal	4	10	100%	-	15.16	9.35	-
Green Hydrogen	1	75	1%	-	-	27,872.59	2.60[51]
Renewable Energy Meters	1	3	35%	-	-	-	-
Total	**8**	**88**	**-**	**2,000**	**5,467,495.2**	**3,268,485.6**	**-**

51 Avoided emissions per kg ammonia produced.

1.3. Energy Efficiency

Project type	Number of Eligible Projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Number of products installed	Attributed energy reduction (MWh)	Attributed avoided emissions (tCO_2e)	Attributed avoided emissions per product (tCO_2e/product)
District Cooling	1	-	100%	1	47.2	29.12	127,535.44
Streetlighting	7	182	100%	210,904	7,746,586.90	4,778,869.46	22.66
HVAC Systems	4	65	100%	6,042	14,958.71	9,228.03	1.53
Smart Metering	1	-	100%	-	-	-	-
Total	**13**	**248**[52]	**-**	**-**	**7,761,592.80**	**4,788,126.61**	**-**

52 The total is different to the sum of the content due to rounding of the values.

1.4. Green Buildings

Location	Number of Eligible Projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Total attributed floor area (m^2)	Attributed reduced energy consumption (MWh):	Attributed avoided emissions (tCO_2e):	Avoided emissions per floor area (tCO_2e/m^2)
Project 1	1	-	100%	7,457,923.00	234,521.63	144,676.39	19.40
Project 2	8	231	100%	559,809.00	189,573.18	116,947.69	208.91
Project 3	1	643	100%	1,704,672.21	73,825.40	45,542.89	26.72
Project 4	1	-	100%	652,847.85	212,655.10	131,186.93	200.95
Total	**11**	**874**	**-**	**10,375,252**	**710,575.30**	**438,353.90**	**42.25**

1.5. Clean Transportation

Project type	Number of Eligible Projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Number of products installed	Attributed energy reduction (MWh)	Attributed avoided emissions (tCO_2e)	Attributed avoided emissions per product ($kgCO_2e$/product)
Charging Infrastructure	8	20	100%	684	3,467,551.91	2,139,132.77	-
Private Electric Vehicles	2	11	100%	211	-	64.06	489
Public Electric Vehicles	5	0	91%	57	-	-	-
Total	**15**	**31**	**-**	**952**	**3,467,551.91**	**2,139,196.83**	**-**

1.6. Sustainable Water Management

1.6.1. Water Recycling

Project Type	Number of eligible projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Attributed wastewater collected (m^3)	Attributed wastewater treated output (m^3)	Attributed Biosolids Collected (t)	Attributed Biosolids Treated Output (t)
Water Recycling Plant	6	79	86%	43,717,083.37	42,257,083.37	11,680	11,680
Total	**6**	**79**	**86%**	**43,717,083.37**	**42,257,083.37**	**11,680**	**11,680**

1.6.2. Desalinisation

Location	Number of eligible projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Attributed annual water treated (m^3)	Attributed annual energy consumption (kWh)	Energy reduced per m^3 (kWh/m^3)	Attributed avoided emissions ($kgCO_2e$)
Desalinisation Plant	1	11.60	1%	1,185,498	7,469.35	6.3	4,607.84
Total	**1**	**11.60**	**1%**	**1,185,498**	**7,469.35**	**6.3**	**4,607.84**

1.7. Pollution Prevention and Control

1.7.1. Wastewater Treatment

Project Type	Number of eligible projects	Total Deployed Amount (mn USD)	Average Base Year Attribution (%)	Attributed wastewater collected (m^3)	Attributed wastewater treated output (m^3)	Attributed Biosolids Collected (t)	Attributed Biosolids Treated Output (t)
Wastewater treatment	2	0	100%	9,125,000	7,117,500	12,630	11,680
Total	**2**	**0**	**100%**	**9,125,000**	**7,117,500**	**12,630**	**11,680**

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