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GREEN ECONOMY POTENTIAL IN EAST JERUSALEM

PART 2

- CHALLENGES AND SOLUTIONS -

FAISAL KILANI



Green Economy Potential in East Jerusalem: CHALLENGES & SOLUTIONS

Commissioned by: **Palestine for Development Foundation (PsDF)**

“Palestine Investment Fund (PIF) Social Investment Subsidiary”



For the: Green Energy and Sustainability Granting Facility

Prepared By: Faisal Kilani

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Preface

In an age where the transformation towards sustainability becomes increasingly critical, the intricate dynamics of local economies warrant focused attention. This follow-up report to the initial market study on East Jerusalem's economic landscape aims to distill actionable strategies for integrating green and circular economies within this unique region.

The complexities encountered in the first phase have shaped a more nuanced understanding, informing a selection process that carefully discriminates between ostensible and substantive sustainability. This document endeavors to refine the criteria for the Green Energy and Sustainability Granting Facility, ensuring that support is directed where it can be most effective.

The development of this report has been an exercise in precision, taking into account the distinctive socio-political fabric of East Jerusalem and the shared aspiration for economic resilience. It seeks to provide a robust framework for decision-makers, offering a strategic approach to fostering a sustainable future.

Acknowledgment is due for the collective expertise and insights that have contributed to the depth and breadth of this report. It is intended to be a valuable resource for guiding the sustainable development of East Jerusalem, serving those dedicated to its economic and environmental prosperity.

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List of Acronyms

CAPEX	Capital Expenditure
CBO	Community Based Organization
CSO	Civil Society Organization
EJ	East Jerusalem
EU	European Union
EV	Electric Vehicles
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IoT	Internet of Things
JDECO	Jerusalem District Electricity Company
MAS	Palestine Economic Policy Research Institute
MSMEs	Micro, Small & Medium Sized Enterprises
NGO	Non-Governmental Organization
OPT	Occupied Palestinian Territories
PCBS	Palestinian Central Bureau of Statistics
PIF	Palestine Investment Fund
PsDF	Palestine for Development Foundation
ROI	Rate of Return on Investment
SROI	Social Rate of Return on Investment
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
CAPEX	Capital Expenditure

1. Introduction

1.1. Background

In the evolving global landscape, sustainability, the green economy, and green energy principles stand as crucial pillars for environmental stewardship and economic resilience. In 1987, the United Nations Brundtland Commission defined sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” This definition of sustainability laid a significant foundation for what would later evolve into the Sustainable Development Goals (SDGs), a collection of 17 interlinked global goals designed to be a “blueprint to achieve a better and more sustainable future for all” by 2030. In terms of green energy, this term has become widely used to group together all the technologies and solutions that have low carbon emissions and reduce the presence of hazardous pollutants in the global and local environments, having zero to minimal environmental impacts, and can be obtained from wind, solar, hydro, geothermal, biomass, and other renewable energy resources. Hence, green energy can be considered an important pillar of technological, social, and industrial development, as well as energy security (Enescu, 2019).

Collectively, Green Economy is the intersection at which sustainability and green energy meet. A green economy is one that aims to reduce environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related to sustainable development and includes low carbon, resource-efficient, and socially inclusive economic growth. The green economy concept encompasses a range of economic activities that contribute to reducing carbon emissions and pollution, enhancing energy and resource efficiency, and preventing the loss of biodiversity and ecosystem services.

The integration of sustainability, green energy, and green economy principles into East Jerusalem’s socio-economic landscape offers a promising avenue for fostering environmental stewardship and economic resilience within this unique context. The city’s historical and cultural significance, coupled with its intricate political and social fabric, necessitates a tailored approach to development that is sensitive to both the environment and the diverse needs of its inhabitants. By adopting green energy solutions, East Jerusalem can mitigate its carbon footprint, enhance its resilience, reduce energy costs, and improve energy security — a crucial aspect for its economic independence and stability.

1.2. Study Context

In October 2023, the first report exploring the Green Energy Potential in East Jerusalem has been prepared, titled “Green Energy Potential in East Jerusalem: A Comprehensive Market Review”. The report explored the existing economic fabric of the Palestinian East Jerusalem, and has identified key sectors within East Jerusalem’s economic fabric, where various classifications and segmentations exist within available literature, however the classification utilized by the PCBS has been adapted as the foundation of the classification and exploration of the existing economic sectors.

The report reveals that while the Civil Society is not a recognized independent sector by itself, it manages and presents various interventions within the socio-economic fabric of the city, and presents a promising sector to integrate green economy. Moreover, while the services sector houses various sub-sectors, tourism included, tourism was treated as an independent sector due to its historical importance in East Jerusalem and its contribution to both the economy, and the social scene of the city. As such, 7 key sectors have been analyzed that included agriculture, services, civil society (i.e., CSOs and NGOs), tourism, construction and housing, manufacturing, and trade, each facing its unique challenges.

In this regard, this report constitutes the second and final report in the series that aims to support Palestine for Development (PsDF) – PIF Social Investment Subsidiary, to assess the current economic landscape of East Jerusalem relevant to the “Green Energy and Sustainability Granting Facility”. Building upon the findings of the first study, this second report aims to explore the pronounced obstacles impeding the adoption of green energy and green economy initiatives, highlighting feasible, sector-centric approaches that facilitate a resilient green economy for East Jerusalem’s MSMEs. Therefore, this report deep-dives into East Jerusalem’s existing businesses within the identified priority sectors, and explores Green Economy and Green Energy integration potential within the city, tailored to its businesses, obstacles, and the Green Energy and Sustainability Granting Facility’s objectives and operations.

1.3. Scope and Objectives

This report focuses on detailing the challenges encountered by businesses operating within the priority sectors as identified in the initial market assessment in East Jerusalem. The report notably focuses on micro, small, and medium-sized enterprises (MSMEs) and non-governmental organizations (NGOs), in the integration of green and circular economy practices. The examination will pivot on businesses within these sectors that are well-positioned to adopt and integrate energy-efficient and sustainable solutions, including innovative equipment, tools, and techniques. The objectives of this report are as follows:

1. To conduct a comprehensive analysis of the current business landscape within the priority sectors, including agriculture, services, civil society, tourism, and manufacturing.
2. To systematically identify and delineate the obstacles these sectors face in embracing green and circular economy methodologies.
3. To devise strategic and viable solutions tailored to the challenges and needs of East Jerusalem’s businesses and their respective sectors.
4. To furnish a strategic framework replete with actionable steps that will catalyze a shift towards a sustainable, green economy in East Jerusalem, ensuring congruence with the overarching goals of the Green Energy and Sustainability Granting Facility.

The aim is to support the Palestine for Development Foundation in fostering economic resilience and environmental sustainability in these key sectors.

1.4. Methodology

The methodology adopted for this report entailed a mixed-methods research approach, merging qualitative and quantitative analysis. Secondary research provided a foundation, examining existing literature, reports, and databases to understand sector-specific dynamics, including business segmentation within priority sectors and their prominence in East Jerusalem's economic fabric. Stakeholder engagement was conducted with the Jerusalem District Electricity Company (JDECO), the Palestinian Central Bureau of Statistics (PCBS), The Palestinian Building Council, UNIDO, and Jerusalem's Arab Chamber of Commerce and Industry. The stakeholder engagement activities aimed to obtain further insight from key players in East Jerusalem's economy and sustainability efforts. Then, a gap analysis was performed, identifying discrepancies between current operations and circular and green economies standards, along with sector-specific challenges in adopting circular and green economy practices.

Solutions were then designed, informed by industry benchmarks and creative problem-solving, and evaluated for feasibility, sustainability, and their potential to effectively address the identified challenges. This led to the creation of a strategic framework designed to guide the transition towards a green economy in East Jerusalem.

Concurrently, the study benchmarked international best practices, which informed the crafting of solutions tailored to the East Jerusalem context, capturing international experiences in adopting green and circular economies and obtaining insight on issues faced in the road of adoption. These were rigorously evaluated for feasibility and sustainability.

The culmination of this research is a recommendations action plan that includes tailored actions for the Green Energy and Sustainability Granting Facility to refine selection criteria, ensuring the promotion of the most viable and impactful green energy and circular economy initiatives.



Figure 1: The Study's Methodology

2. East Jerusalem's Green Economy Priority Sectors

2.1. Overview

The first report's findings on the potential for green economy integration are directly tied to the socio-economic dynamics of East Jerusalem. The prioritization of sectors as seen in table 1 below reflects an economy ready and ripe for transformation, leveraging its rich cultural and historical tapestry. The civil society sector's role, while not a recognized economic sector, transcends traditional economic boundaries with significant interventions in health and education, underscores a multifaceted approach to sustainability. Additionally, the tourism sector, while historically known to be one of the pillars of the services sector is listed independently due to its importance in East Jerusalem's economy.

This intrinsic connection between sectoral potential and the socio-economic landscape underscores a forward-looking vision for East Jerusalem, where green economic principles become a catalyst for comprehensive, inclusive development.

Table 1: Sector Prioritization of East Jerusalem's Economy in Terms of Green Economy Integration

Sector	Sector General Potential for Green Economy Integration	Impact of MSME level interventions	Severity of Associated Risks at Sectoral Level
Agriculture	High	High	Low
services	High	High	Moderate
Civil Society	High	High	Moderate
Tourism	High	moderate	moderate
Construction and Housing	High	Low	high
manufacturing	High	High	moderate
Wholesale and Trade	Low	moderate	low

2.2. Analysis of Core Enterprises Within East Jerusalem's Priority Sectors

On the 13th of December, a consultation with the Palestinian Central Bureau of Statistics (PCBS) was carried to explore further available resources and insight into East Jerusalem's economy. Through a review of available data, it was highlighted that the typical survey activities of economic establishments is internationally conducted every 10 years, however the PCBS conducts a survey of these establishments every 5 years, providing a more updated overview of the available establishments and their numbers.

The reviewed establishments records obtained from PCBS revealed vital data for the study and enabled a deeper look into the numbers of enterprises that form the economic sectors of East Jerusalem. The data reveal that there are 9,704 Governmental, Non-Governmental (NGOs), and Private Sector establishments operating in East Jerusalem, with 4,466 in J1 and 5,238 in J2, employing a total of 34,786 persons (19,182 in J1 and 15,604 in J2). (PCBS, 2018).

The data additionally show that the geographic distribution of the economic establishments of East Jerusalem are more centered in J2 areas than are in J1. Where the highest number of establishments in J2 was recorded in Al' Eizariya with 1,086 establishments, followed by Al Ram & Dahiyet Al Bareed 1,059, Anata 690, and Abu Dis 398. Additionally, the lowest areas recorded included An Nabi Samwel 1, Kharayib Umm Al Lahim 5, and Beit Hanina Al Balad with 6 recorded establishments. The figure below denotes the spread and variation of governmental, non-governmental and NGOs within J2 areas.

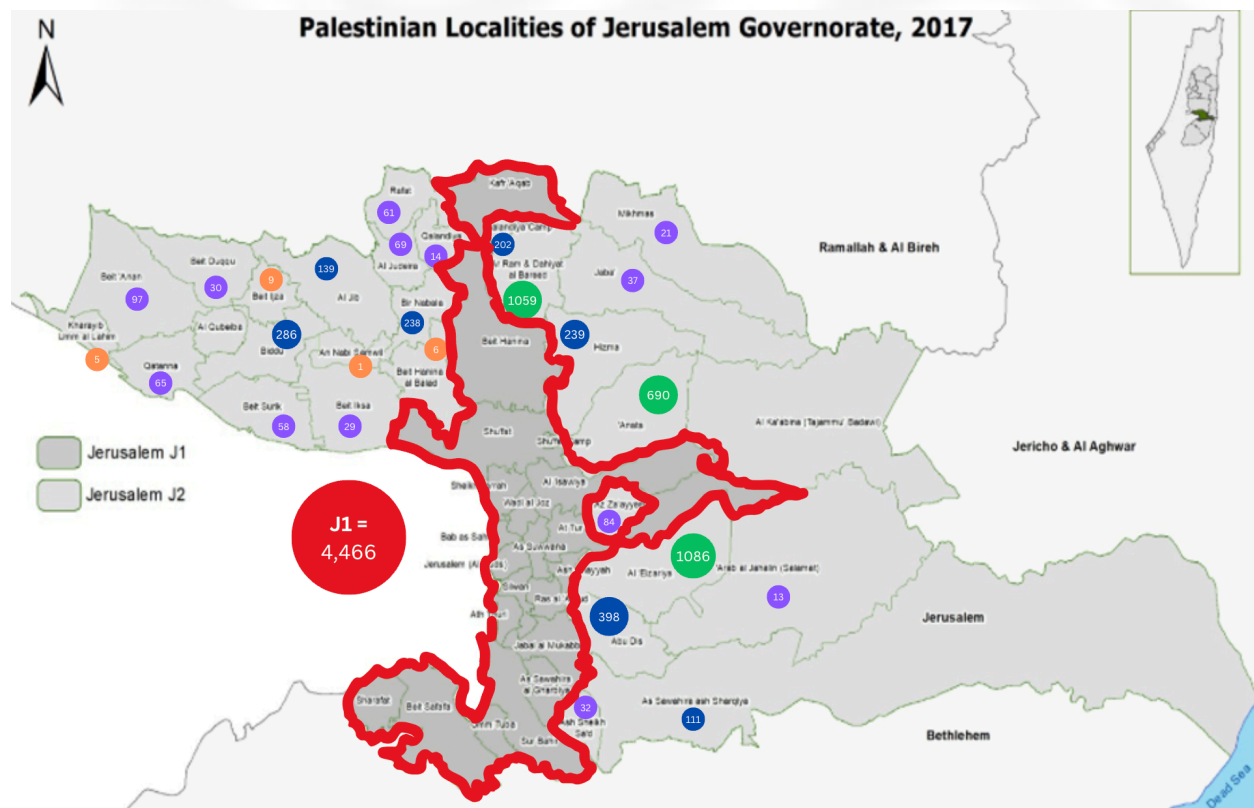


Figure 2: The Distribution of Establishments in East Jerusalem

It is hard to obtain geo-differentiated data for J1 areas of East Jerusalem as the registration of these entities is mostly with the Israeli Government, as Palestinian surveys are not allowed to extend to the occupied territories. Additionally, Israeli surveys have not been found to include such data, and if they did, they do not provide segregated data on Arab owned businesses. Hence, for the purposes of this report, the PCBS collective data for J1 is relied on where it would not serve the

objective of the report to utilize Israeli surveys as they include both Israeli and Arab owned businesses in J1 areas. Further details of the data presented in figure 2 is tabulated in Annex I.

When examining the fabric of East Jerusalem’s economic scenery, various enterprises arise within its economic sectors. A detailed examination has been conducted to reconcile the existing enterprises and the sector under which they operate. Out of the 9,704 enterprises operating in both J1 and J2 9,628 were classified per the corresponding sector, with others listed as “not stated” or “other activities”. The numbers were sufficient to provide an overall understanding of the dynamics of the market and to confirm the findings of the first report and PCBS’s annual statistical yearbook data in order to understand the major fields within the identified priority sectors. The data revealed that as previously denoted in the first report, Whole sale and retail trade, including repair of motor vehicles and motorcycles, comprised a significant 54.9% of the total number of operating enterprises, corresponding to it being the largest contributor to East Jerusalem’s economy, this was followed by the Manufacturing sector with 12.65% of total establishments. At the lower end of the spectrum, most notable sectors included Information and communication with 0.51%, construction with 0.35%, real estate activities with 0.21%, and mining and quarrying with 0.07% of total establishments.

The following chart shows the most significant sectors and their corresponding percentage of total enterprises in East Jerusalem, further detailed breakdown is available in Annex II.

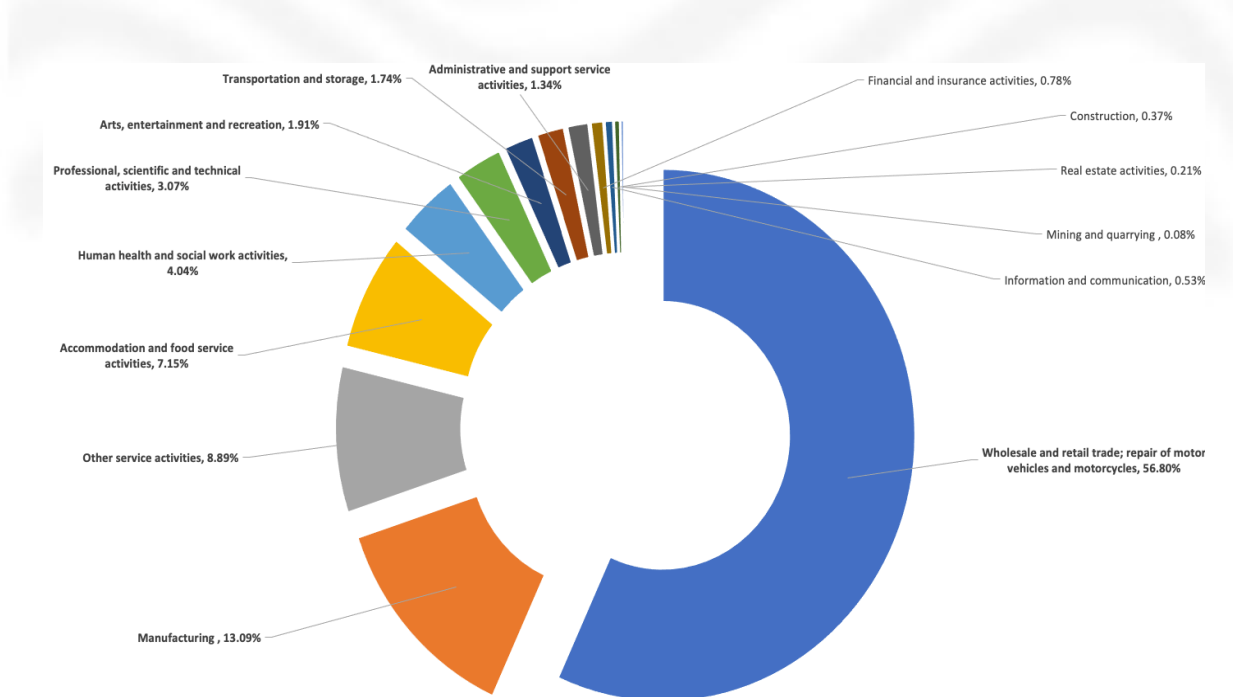


Figure 3: Economic Sectors Ranked Based on their Corresponding Number of Establishments

The sectoral classification is a critical tool for the Green Energy and Sustainability Granting Facility, offering insight into the geographical spread of economic enterprises across East Jerusalem. This classification reveals not only the density and distribution of enterprises but also provides a comparative analysis of their numbers against their contributions to the local GDP. Such detailed mapping enables the Facility to pinpoint where these enterprises are predominantly located, assess the likelihood of encountering clusters of similar businesses within each sector, and discern which sectors, though perhaps smaller in number, exert a significant impact on the economy. This approach, in alignment with the sector prioritization outlined in the first report, enhances the Facility's strategic planning, ensuring that priority is given to sectors that, despite their size, play a crucial role in the economic landscape of East Jerusalem, and more importantly, show potential for the integration of green and circular economy within their operations.

The following sections within this chapter will focus on each priority sector, identifying the types and numbers of establishments within, in line with the prioritization conducted in table 1. Hence, looking at figure 3, and while wholesale and retail trade including repair of motor vehicles and motorcycles constitute 56.8% of total economic enterprises in East Jerusalem, the report will not discuss its details as it has exhibited low potential for green economy initiatives given its operations and as has been detailed in the first report. Therefore, the following sections will delve into the manufacturing, services, and tourism (accommodation and food services) in further detail. Additionally, other sectors that form an important pillar of green economy integration despite their low figures such as agriculture will be discussed. Moreover, enterprises of lower Presence such as transportation and storage, or professional and technical activities will be circumstantially discussed as they could present potential for green economy adoption if certain criteria are met.

2.2.1. The Manufacturing Sector

The manufacturing sector, quarrying and mining included has shown significant shift towards J2 areas in the past years, with only around 10% are still operating inside the segregation wall. The industrial sector (excluding mining and quarrying) is centered around transformative and light industries, with 1,218 industrial facilities in East Jerusalem in total. In addition to 7 enterprises in mining and quarrying.

The highest number of enterprises within the manufacturing sector are of furniture manufacturing with 334 enterprises, followed by prefabricated metal manufacturing with 279 enterprises, and food products with 238 establishments. At the lower end, beverages, tobacco, and pharmaceuticals stand with 1 registered establishment each in East Jerusalem. Figure 4 below provides a waterfall scheme of the distribution of manufacturing enterprises in East Jerusalem. Further details are tabulated in Annex II.

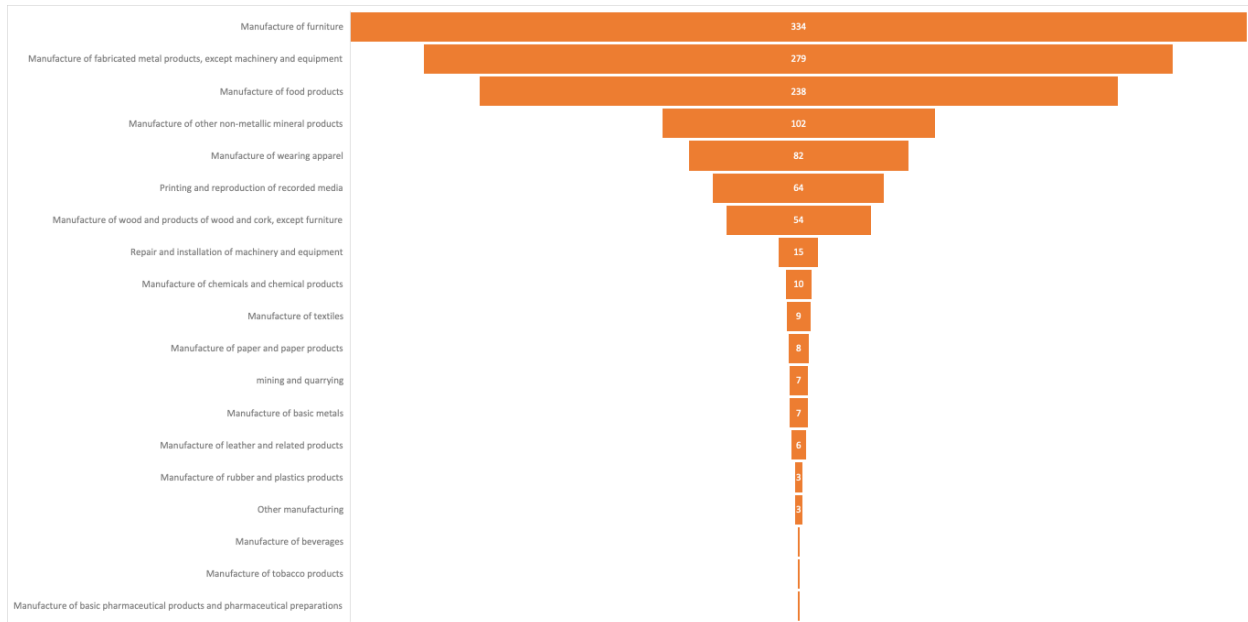


Figure 4: Number of Enterprises within the Manufacturing Sector in East Jerusalem

The industrial and manufacturing sector in East Jerusalem encompasses a variety of sub-sectors, each with its own potential to embrace green energy solutions and circular economy principles:

- **Manufacturing of furniture and Wood:** Furniture and wood manufacturing stand out for their artisanal heritage and opportunity to incorporate sustainable materials and more efficient production techniques.
- **Manufacturing of apparels and textiles:** Apparel and textile production, with its rich cultural significance, can significantly benefit from advanced practices that reduce water and chemical use.
- **Manufacturing of Metals, plastics, and chemicals:** The manufacture of metals, plastics, and chemicals is critical due to its widespread industrial use and the potential for introducing substantial recycling and waste reduction measures.
- Manufacturing of Food products
- **Other industries:** (incl. quarrying and mining, leather, printing, paper, and repair of machinery and equipment).

Therefore, the subsequent sections of this study, relevant to the industrial and manufacturing sector will discuss the impediments, as well as sector and business-oriented solutions for the integration of green economy and green energy initiatives.

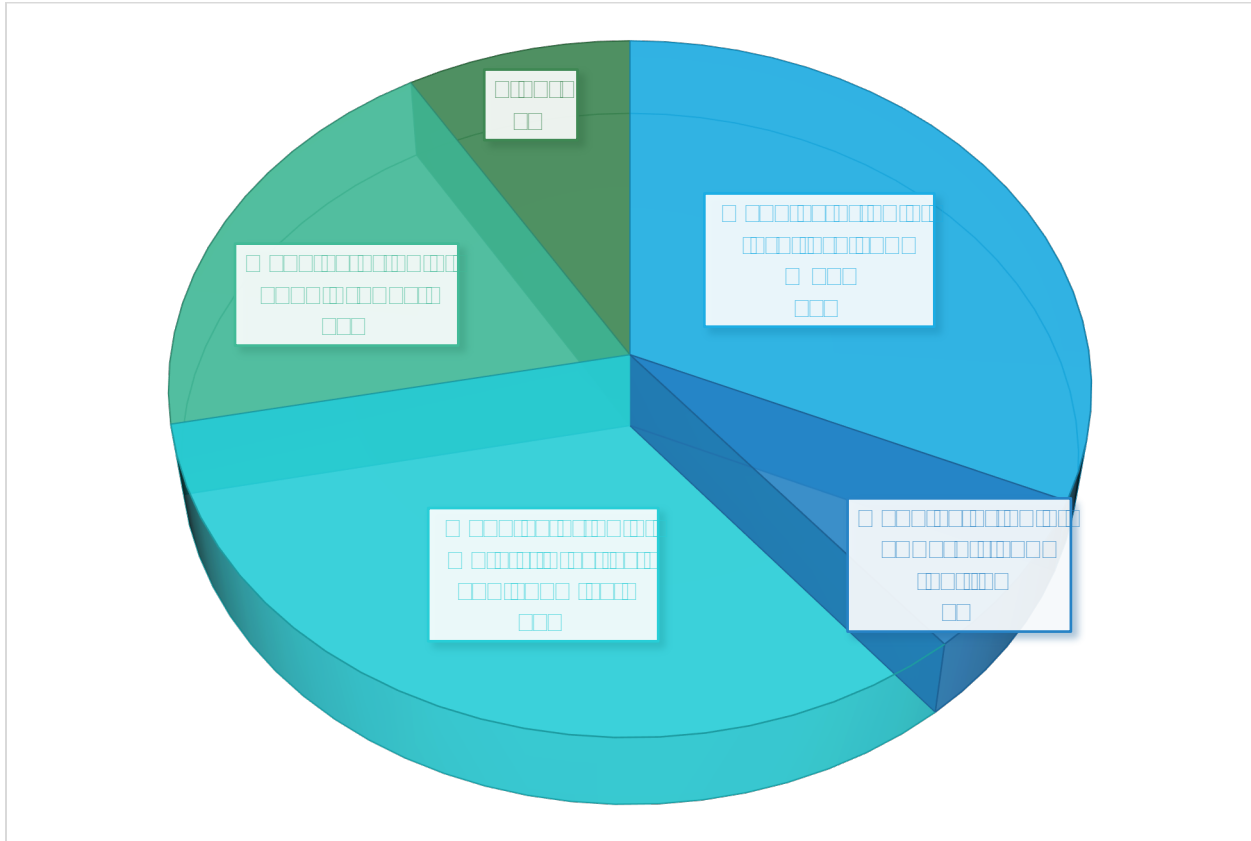


Figure 5: Most Prominent Businesses within the Manufacturing Sector Relevant to Green Economy Integration

2.2.2. The Tourism Sector

The tourism sector, historically the cornerstone of East Jerusalem's economy, has experienced modest growth in recent years. Its rich tapestry is a testament to the city's vibrant history and culture, which has been historically the pillar upon which other economic activities has relied. However, data from the last decade shows a slight increase of just 0.7% in sectoral revenue from 2010 to 2020. This is in stark contrast to West Jerusalem, where the hospitality industry has seen a tangible expansion, increasing between 10 – 27% annually (IPCC & FES, 2020).

A closer look at the data from PCBS reveals that the tourism-related businesses in East Jerusalem predominantly fall into two categories: accommodation services and food and beverage service activities, which include cafes and restaurants. Nonetheless, a broader spectrum of businesses, listed under different sectors such as services and health, also contributes significantly to the sector. These include rental and leasing services, travel agencies, tour operators, reservation services, and a variety of recreational activities such as arts, sports and amusement parks. These entities, while classified under different service categories, are integral to the tourism ecosystem, providing essential services that enhance the tourist experience. This section will further dissect the scale and

scope of these establishments, identifying those that are most critical to the sector's growth and sustainability, and in particular the potential for adoption of green economy initiatives as mandated by the scope of this report.

Therefore, and for the purposes of this report, the tourism sector will include the following enterprises:

- Accommodation
- Food and beverage service activities
- Rental and leasing activities
- Travel agency, tour operator, reservation service and related activities
- Sports activities and amusement and recreation activities
- Arts, entertainment and recreation

The main enterprises under the tourism sector (accommodation & food and beverage services) comprise 19 and 646 enterprises respectively, amounting for 6.91% of total economic establishments in East Jerusalem. However, when taking the 6 categories listed above, the tourism sector then contributes to around 12% of total economic establishments in East Jerusalem as seen in figure 6 below.

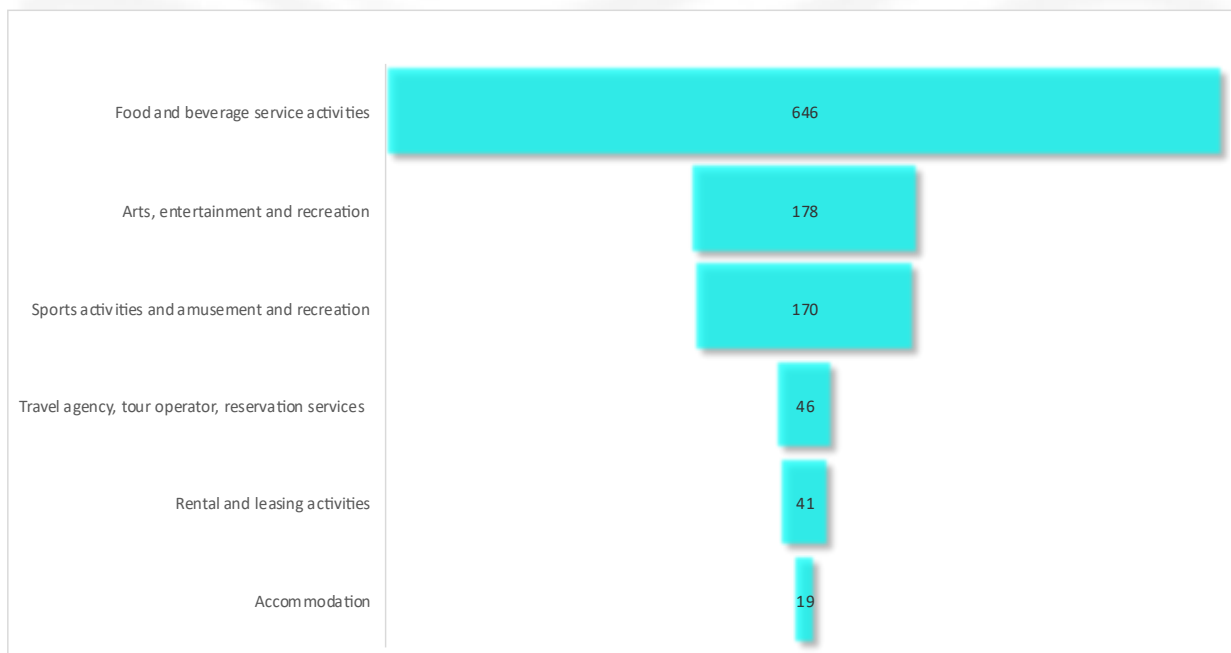


Figure 6: Number of Enterprises within the Tourism Sector in East Jerusalem

Within the diverse fabric of East Jerusalem's tourism sector, enterprises such as rental and leasing services, travel agencies, tour operators, and reservation services constitute the backbone of support activities. These operations are predominantly office-based and share common operational characteristics with other administrative support services. As such, they do not necessitate industry-specific green solutions but rather can adopt environmental best practices applicable to office

environments. These practices are aligned with broader strategies for greening administrative operations and are discussed alongside other office-based industries within the context of the green economy, as illustrated in Figure 3. This holistic approach ensures that while they are auxiliary to the tourism sector, they are integrated into the overarching sustainability framework that spans all office-based enterprises.

Therefore, the tourism sector’s enterprises can be categorized into the following in line with green economy solutions;

- Hotels and hostels (accommodation)
- Restaurants, Cafes, food and beverage establishments
- Arts, sports, and Recreational activities

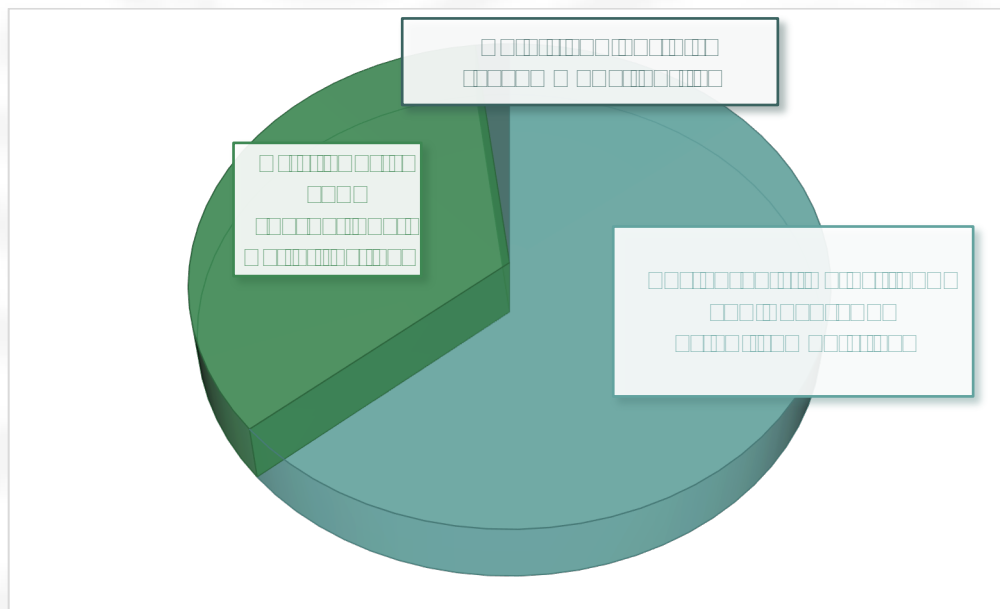


Figure 7: Most Prominent Businesses within the Tourism Sector Relevant to Green Economy Integration

2.2.3. The Services Sector

The service sector produces intangible goods, more precisely services instead of goods, and according to the U.S. Census Bureau, it comprises various service industries including warehousing and transportation services; information services; securities and other investment services;

professional services; waste management; health care and social assistance; and arts, entertainment, and recreation¹.

Various enterprises listed in figure 3 can collectively be united under the Services sector. The services sector carries its own attributes and intrinsicities; firstly and as described in the first report, major sub-sectors including the health and education services are managed and operated mostly by the civil society. Secondly, other main services such as the ICT and Storage & Transport did not show intrinsic viability in adopting green economy solutions unless circumstantially and if certain parameters are met, which are later described in Chapter 5.

To obtain a comprehensive view of the number of enterprises operating under the services sector in East Jerusalem, and to properly gain insight to the weight it holds over the city's economy, given that in 2014 – 201, the services sector was responsible for an astonishing 53 % of East Jerusalem's economic contribution by itself (MAS, 2019), the relevant businesses and enterprises need to be assessed and grouped to form subsectors that can be then individually analyzed.

According to the sub-sectors and enterprises listed in figure 3 and in Annex II, 11 sub-sectors can be attributed to the services sector;

- Administrative and support service activities
- Human health and social work activities
- Education
- Professional, scientific and technical activities
- Financial and insurance activities
- Information and communication
- Transportation and storage
- Electricity, gas, steam and air conditioning supply
- Water supply; sewerage, waste management and remediation activities
- Other service activities

These 11 sub-sectors comprise 2,188 (23%) of the total establishments in East Jerusalem, and are distributed in terms of number as shown in figure 8 below:

¹ U.S Census Bureau 2020:
<https://www.census.gov/content/dam/Census/library/publications/2020/econ/snapshot-service-industries.pdf>

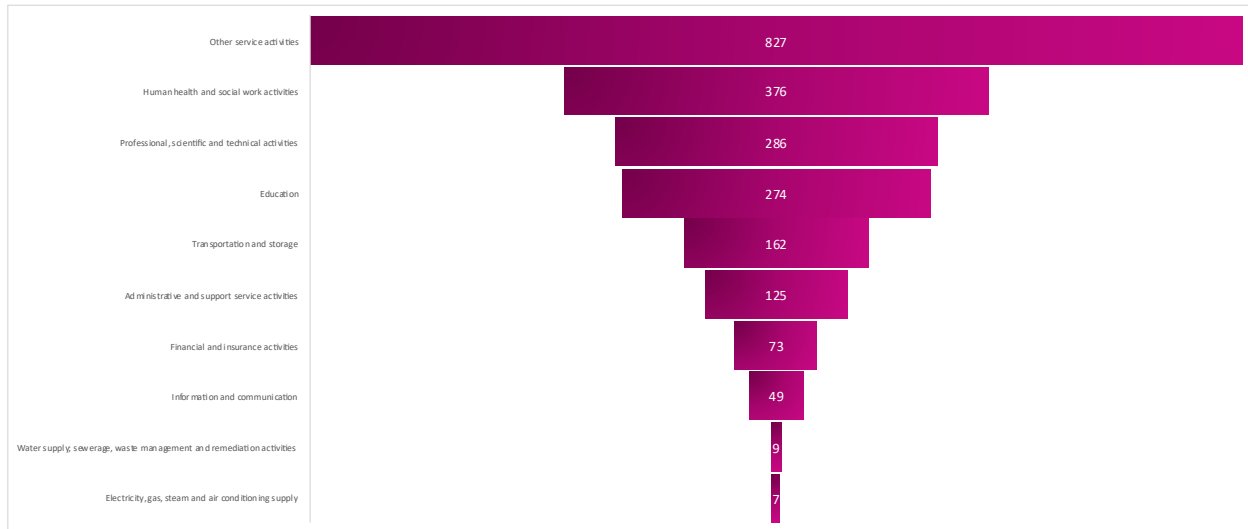


Figure 8: Number of Enterprises within the Services Sector in East Jerusalem

To facilitate the understanding of the underlying sub-sectors, and to obtain better understanding of their intrinsic impediments towards green energy adoption, as well as their tailored solutions, the following segregation will be implemented;

- Firstly, and as detailed in the previous report in this study, education and health are predominantly managed and operated by the civil society sector. Therefore, they will be discussed in the following subsection 2.2.4 under civil society along with social work.
- Secondly, office-based services which produce intangible goods and services will be grouped; including (i) Professional, scientific, and technical activities, (ii) administrative and support service activities, (iii) Financial and insurance activities, and (iv) information and communication activities.
- Thirdly, transportation and storage while determined as a non-priority sub-sector for the context of this research will be discussed circumstantially as the Facility has received various applications within this sub-sector, and tailored solutions will be accordingly explored.
- And Last, Water supply; sewerage, waste management and remediation activities, Electricity, gas, steam and air conditioning supply, and “other services” are not included as they do not relate to the purposes of this research relevant to green energy, economy, and the Facility’s objectives.

Therefore, figure 9 below provides a combined overview of the services’ enterprises and the businesses which are to be discussed throughout this study;

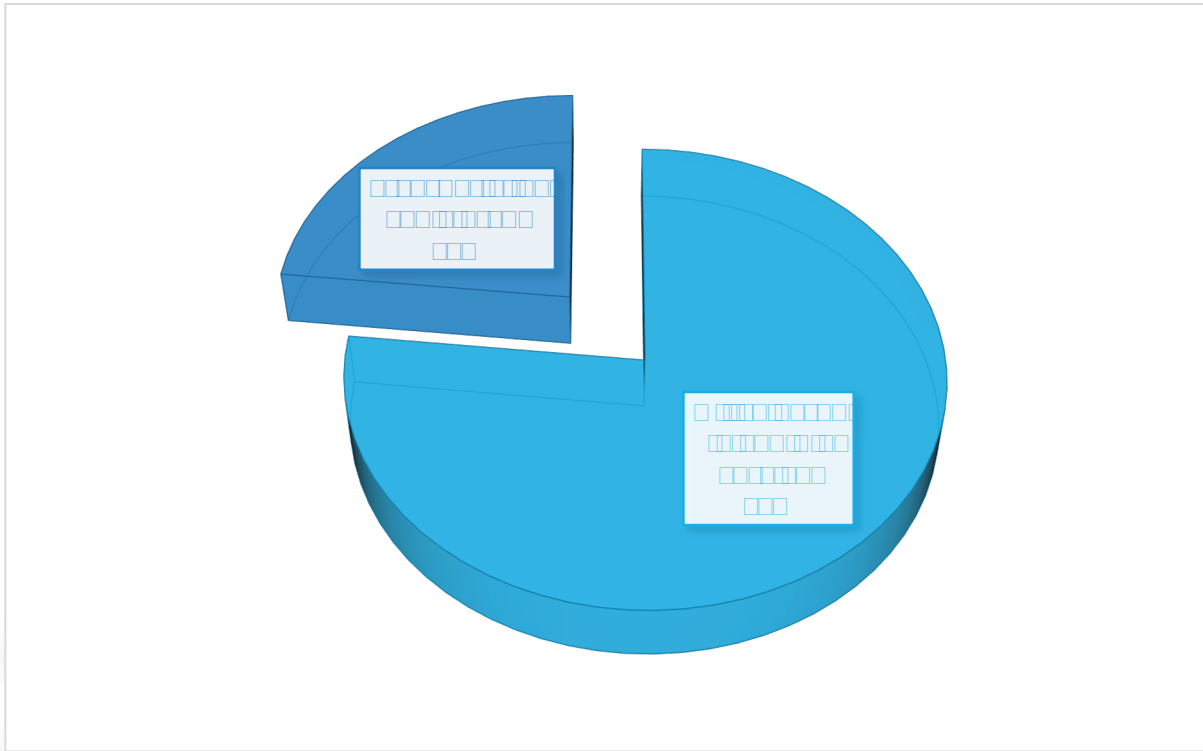


Figure 9: Most Prominent Businesses within the Services Sector Relevant to Green Economy Integration

2.2.4. The Civil Society Sector

While not a formal economic sector, the civil society in East Jerusalem has historically contributed to its socio-economy. This sector has its roots in the community's response to various socio-political and economic challenges over the decades. Historically, many emerged as grassroots initiatives, addressing immediate community needs such as education, healthcare, and social welfare. With others being international organizations establishing offices and programmes in East Jerusalem as part of humanitarian relief activities. Over time, as the political landscape evolved and the challenges became multifaceted, the role of NGOs expanded. They began to engage in advocacy, community development, and capacity-building, among other areas.

As denoted in the first report, it is estimated that there are around 456 NGOs with Palestinian registration and active in East Jerusalem, divided equally between J1 and J2 areas. These NGOs operate in key areas that include (i) Social Welfare; Youth Empowerment, Inclusion, and Community Development, (ii) Cultural Heritage and Arts, (iii) Business Incubation, (iv) Learning and Education, and (v) Healthcare.

It is evident that there is a strong interlink between the civil society and the identified priority sectors and their respective enterprises. As art and recreation has been addressed under tourism, and business incubation is listed under the services sector, this can apply to other business types and has to be considered in the Facility’s selection criteria. Nevertheless, for the purposes of this report, Health care and social welfare, as well as education will be treated as the main sub-sectors operated by East Jerusalem’s civil society.

Therefore, Educational and healthcare & social work amount for 274 and 376 establishments respectively. A total of 650 enterprises amounting for around 7% of East Jerusalem’s total establishments identified in figure 3 and annex II.

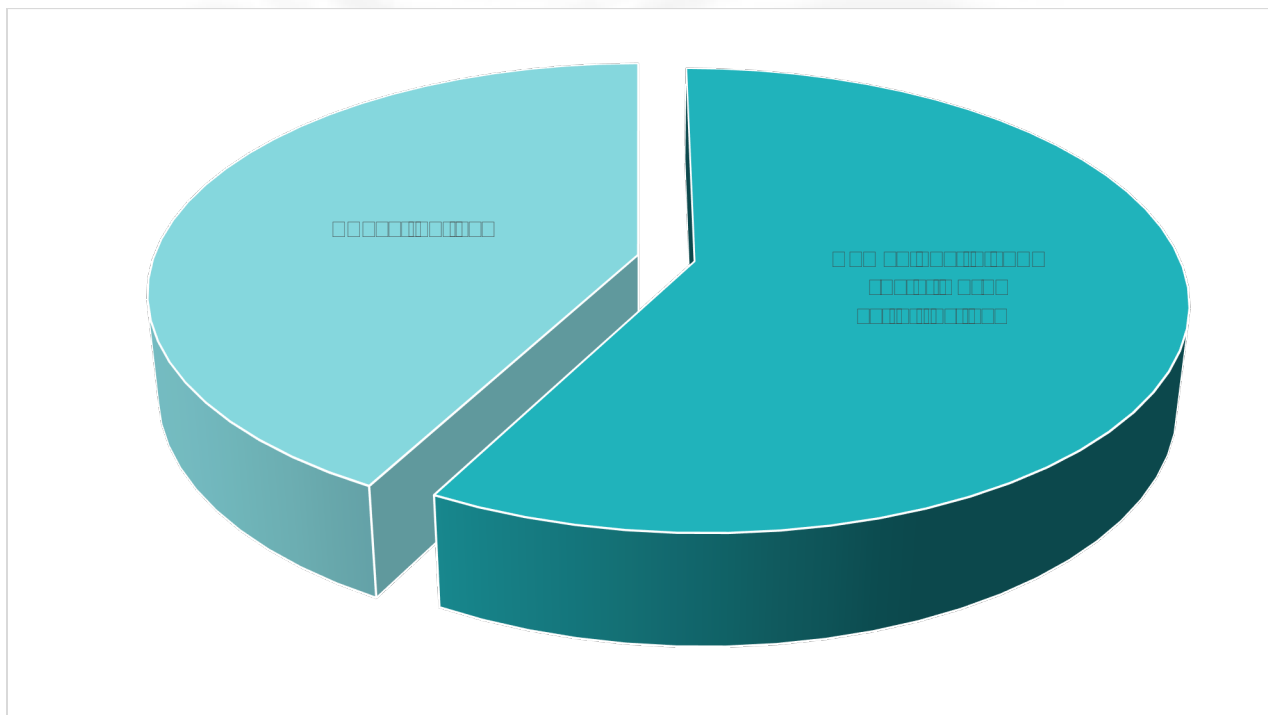


Figure 10: Most Prominent Businesses within the Services Sector Relevant to Green Economy Integration

2.2.5. The Agricultural Sector

Data on the agricultural sector in East Jerusalem is not readily available, and it is hard to estimate the number of registered agricultural enterprises especially in J1 areas due to the restrictions imposed by the Israeli Authorities on this sector, which forced many farmers to leave their crafts or move their businesses outside the wall. Moreover, Palestine in general does not have an updated agricultural survey, where the latest available data date back to 2010 and before.

Today, vegetables, fruit and other products are supplied by the Israel's Central Cooperative for the Marketing of Agricultural Produce (Tnuva), with the exception of olive, which becomes nowadays the most important crop in East Jerusalem. Pressure on livestock production has continued to grow. Several orders by the Israeli Jerusalem Municipality and the Israeli Ministry of Health restrict livestock-related activities in the city (MAS, 2019). By 2021, the agricultural sector's economic contribution dropped to 0.2%, showing a continuing decline in this vital sector's contribution with 0.4% of employed individuals taking roles in the agricultural sector dropping from 2.6% in 2011(MAS, 2019) (PCBS, 2023b). Moreover, only 0.9% of families in East Jerusalem rely on agriculture as their main source of income.

In terms of agricultural ownerships, Jerusalem recorded one of the lowest percentages in the West Bank, with only 2% of the total agricultural ownerships in Palestine. Nevertheless, the agricultural sector of East Jerusalem poses high potential for green economy and green energy adaptation, where East Jerusalem is the second governorate with the lowest use of chemical fertilizers and relies mostly on rainfed crops (MAS & PCBS, 2010).

Moreover, in terms of cattle and livestock, East Jerusalem contributes with a mere 1.1% of the total Palestinian count, with Hebron having the largest number of 25%. (PCBS, 2013).

Therefore, it is difficult to classify East Jerusalem's agricultural sector per "enterprises" as firstly the city lacks formal and registered agricultural sector where it relies on individual and family-based farming operations, and secondly, registered enterprises are listed under the manufacturing sector such as dairy production. Yet, this sector holds immense potential for green energy and green economy, and has to be supported due to its marginalization and the challenges that it has been facing which has significantly diminished the sectors potential of contributing to the city's economy.

2.3. Analysis of Enterprises Within Other Non-Priority Sectors

In examining the commercial landscape of East Jerusalem, the wholesale and retail trade, as well as the construction and housing sectors, emerge as areas with comparatively lower potential for the adoption of green and circular economy practices. These sectors, traditionally pivotal for the economic throughput of the region, present a paradox within the green economy framework. On one hand, the wholesale and retail trade sector, while vast in its reach (56.8% of all economic enterprises in East Jerusalem) and essential for market dynamics, is constrained in terms of the scope for implementing green initiatives. The potential for environmental impact here often aligns with enhancements in energy efficiency and sustainable resource management within the business premises, which, although beneficial, may not yield transformative change in the sector's overall green economy integration.

On the other hand, the construction and housing sector holds a significant latent capacity for green development. However, the realization of this potential is often impeded by substantial financial barriers. Green construction and sustainable housing, while strategically important at a macroeconomic level, require intensive capital investment, far beyond the current fiscal scope of Micro, Small, and Medium-sized Enterprises (MSMEs) and the budgetary constraints of the Facility. The financial outlay needed for substantial green retrofitting or the integration of sustainable building practices is typically within the purview of larger-scale developments supported by national or regional policy initiatives, rather than the targeted interventions of the Facility, which primarily aims to catalyze MSME growth.

Despite these challenges, it is not to say that opportunities for green advancement are entirely absent within these sectors. Therefore, the circumstances under which such potential might materialize is further discussed under chapter 5. The following section provides an overview of the sub-sectors and enterprises to obtain insight to their nature of operations.

2.3.1. The Wholesale and Retail Trade Sector

The wholesale and retail trade sector, including repair of motor vehicles and motorcycles comprises over half of the economic establishments of East Jerusalem, with 5,286 establishments (55%). Out of these, and as can be seen in figure 11 below, the majority of this sector’s establishments are related to general retail trade (83.7%), and wholesale activities are at 3.3%. In terms of wholesale, retail trade, and repair of motor vehicles and motorcycles, these comprise 13% of the number of establishments in this sector.

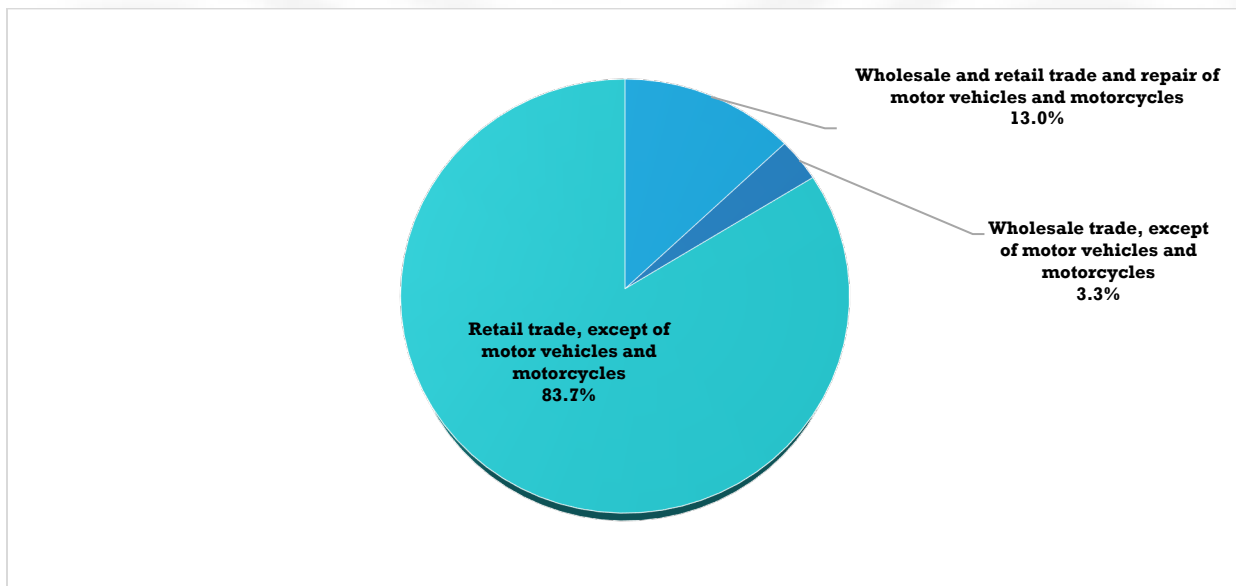


Figure 11: Most Prominent Sub-sectors within the Wholesale and Retail Trade Sector

As such, the report will deal with the specific cases under which this sector could present feasible integration for green energy and green economy solutions particularly for the following;

- General Wholesale and Retail Trade (incl. Motor Vehicles and Motorcycles)
- Repair of motor vehicles and motorcycles

Where for the first, the solutions presented will be applicable for the general wholesale and retail trade businesses. However, for the repair of motor vehicles and motorcycles, more diverse array of solutions could be presented, and as such they are categorized accordingly.

2.3.2. The Construction and Housing Sector

Globally, the construction sector was responsible for 5% of CO2 equivalent emissions in 2020. McKinsey & Company identify ten pivotal sectors within the green economy, with construction leading the list. For interventions within this sector to be effective, they must be orchestrated strategically at a macro-level. Considering the context of Micro, Small, and Medium Enterprises (MSMEs) and the Granting Facility, such interventions typically yield a low impact and carry a high risk, as elaborated in the initial report. However, under certain conditions and with specific activities, there is potential for positive outcomes. Effective planning and execution as supportive and auxiliary services to the main construction activities can lead to benefits. These possibilities are further explored in Chapter 5.

Looking at the enterprises comprising this sector, there are only 18 building construction enterprises, with 16 more relevant to specialized construction activities, such activities include : demolition, site preparation, electrical installations, plumbing and HVAC, and other finishing works. Moreover, this sector encompasses the housing sub-sector, or real-estate, where East Jerusalem contains 20 registered enterprises.



Figure 12: Composition of Active Enterprises in the Construction and Housing Sector

As such, specialized construction activities do not entail site specific activities through which green energy and economy solutions could be implemented and are rather diverse, making it difficult and not feasible for the Granting Facility's purposes. Additionally, the housing sector is not within the priority list and does not support MSMEs, leaving the construction of buildings as the main industry within this sector, where if certain activities are conducted, the viability of adopting green economy and energy solutions could be present.

2.4. Summary of Targeted Businesses

In line with what has been presented in sections 2.2 and 2.3, the following table summarized the businesses which will be further discussed throughout this report;

Table 2: Summary of Enterprises in Priority and Non-Priority Sectors with Potential for Green Energy and Economy Adoption

CATEGORY	PRIORITY SECTORS					NON-PRIORITY SECTORS	
SECTOR	MANUFACTURING	TOURISM	SERVICES	CIVIL SOCIETY	AGRICULTURE	WHOLESALE AND RETAIL TRADE	CONSTRUCTION AND HOUSING SECTOR
ENTERPRISES	Manufacturing of Furniture and Wood	Accommodation (Hotels and Hostels)	Office Based Intangible Services	Health and Social Work**	Livestock	General Wholesale and Retail Trade (incl. Motor Vehicles and Motorcycles)	Construction of Buildings
	Manufacturing of Apparels and Textiles	Restaurants, Cafes, and Food & Beverage Establishments	Transportation and Storage				
	Manufacturing of Metals, Plastics, and Chemicals	Arts, Sports, and Recreational Activities	Health**	Education**	Plant Production	Repair of motor vehicles and motorcycles	
	Other Manufacturing Industries (General incl. food and beverage)		Education**				

** Health and Education have been listed as major priority enterprises under the civil society sector, yet they are present as private sector establishments with similar solutions, yet lower impact within the Granting Facility. Examples include private clinics which are listed under services, and driving schools which are listed under education in the services sector.

These listed businesses form the basis of this report's analysis, the following sections will detail relevant impediments and business-tailored solutions, assisting the Granting Facility into guiding MSMEs to maximize their potential of green energy and economy integration.



3. Sustainability and Green Economy: Global Trends and Best Practice

Greening smaller enterprises poses challenges. Most MSMEs focus their efforts on survival – i.e., short-term profitability, ensuring their day-to-day operations, maintaining revenue and paying salaries. This is especially true of small and micro enterprises, which tend to operate on relatively short time horizons. Improving environmental performance may seem like an additional cost of doing business for MSMEs. They rarely have (or can afford) dedicated staff to work on environmental performance, including understanding sometimes complex environmental requirements. However, experience from around the world demonstrates that adopting greener practices can have real benefits for MSMEs, including increasing profitability and lowering the operating costs, increasing competitiveness and resilience, and opening access to new markets and sources of finance.

3.1. Costa Rica Experience

Costa Rica has twice topped the New Economic Foundation's rankings for sustainability, generates almost all its electricity from renewable sources, and has set clear ambitions to become carbon-neutral by 2050, but likely much sooner². Costa Rica serves as a global beacon for integrating a green economy into its micro, small, and medium enterprises (MSMEs). The following highlights successful initiatives that could be implemented by the Green Energy and Sustainability Granting Facility;

- **National Green Label Program:** Launched in 1997, this voluntary certification program recognizes businesses committed to environmental sustainability. To qualify, MSMEs must meet rigorous criteria across various aspects, including:
 - Waste management: Implementing waste reduction, recycling, and composting practices.
 - Resource efficiency: Optimizing energy and water consumption through efficient technologies and processes.
 - Pollution control: Minimizing air, water, and soil pollution through proper waste disposal and emission control measures.
 - Sustainable sourcing: Utilizing environmentally friendly materials and products in their operations.
- **Benefits for MSMEs include:**
 - Enhanced market access: The Green Label acts as a trusted eco-badge, attracting environmentally conscious consumers and businesses.
 - Tax incentives: Green-certified MSMEs receive lower corporate taxes and access to preferential financing.

² <https://greeneconomytracker.org/country/costa-rica#:~:text=Costa%20Rica%20has%20twice%20topped,2050%2C%20but%20likely%20much%20sooner>

- Technical assistance: The program provides resources and guidance to help MSMEs implement sustainable practices.

This initiative have yielded impressive results. Over 2,500 businesses hold the Green Label, representing 10% of all MSMEs in Costa Rica.

- **Community Based Eco-Tourism:** Costa Rica's remarkable success in ecotourism serves as an inspiring example of sustainable practices in the tourism industry. This Central American nation has prioritized environmental conservation and community engagement to create a model that aligns with the Granting Facility's mission. In Costa Rica, ecotourism ventures are not only about showcasing breathtaking natural landscapes but also about responsible tourism. Moreover, local communities actively participate in ecotourism initiatives, ensuring that the economic benefits are distributed widely. The Granting Facility can draw from Costa Rica's experience by supporting eco-friendly tourism ventures among MSMEs, fostering responsible tourism practices, working with hotels on their sustainability ratings, and encouraging community engagement.

3.2. United Kingdom Experience

In the UK, there are government-backed green business grants specifically designed to assist MSMEs in adopting sustainable and eco-friendly practices. These grants are administered by local authorities or relevant government agencies and can be accessed by businesses that meet certain criteria.

The grants are firstly administered by an eligibility criteria, where to qualify for these grants, MSMEs need to demonstrate their commitment to implementing green initiatives. This could include measures to reduce carbon emissions, improve energy efficiency, or transition to renewable energy sources.

Secondly, and most important, Alongside the financial support, MSMEs can access expert guidance and technical assistance to identify the most suitable green initiatives for their specific operations. This support helps businesses make informed decisions about sustainability measures. Where Recipients of these grants are required to measure and report the impact of their sustainability initiatives. This data helps assess the effectiveness of the grants program and allows for continuous improvement.

3.3. Rwanda Experience

Rwanda's Green Fund, also known as "FONERWA" (Fonds National pour l'Environnement au Rwanda), offers valuable insights relevant to the objectives of the Granting Facility. FONERWA is a groundbreaking initiative that focuses on environmental sustainability and green growth. It provides financial support to projects and initiatives that align with these principles, making it a pertinent case study for the Granting Facility's mission.

One key aspect of FONERWA's approach is its comprehensive eligibility criteria. To qualify for funding, projects must demonstrate their commitment to environmental sustainability, just as MSMEs seeking grants from the Granting Facility are required to do. This alignment ensures that the funded initiatives are genuinely focused on green and sustainable practices.

FONERWA also emphasizes the importance of measuring and reporting impact, which is in line with the Granting Facility's goals. By requiring projects to assess and communicate the results of their sustainability efforts, both initiatives promote accountability and transparency.

Additionally, FONERWA's approach extends beyond financial support. It provides technical assistance and capacity-building to project implementers, helping them make informed decisions about sustainability measures. This emphasis on expert guidance mirrors the multifaceted support approach advocated by the Granting Facility.

Furthermore, FONERWA's success in mobilizing private sector investments for green projects can offer valuable lessons for the Granting Facility in leveraging private sector partnerships to enhance its impact.

3.4. Denmark Experience

Copenhagen, Denmark, stands as a paragon of urban sustainability, particularly recognized for its innovative approach to integrating green practices into city planning and development. Central to this approach is the "Green Planning Tool," a pioneering strategy employed by the municipality to ensure that all urban projects contribute positively to the city's environmental and social fabric. This tool calculates a "green factor" for public projects, incorporating both the quantitative and qualitative aspects of urban nature into the planning process. The comprehensive approach has led to the successful implementation of projects that not only address climate adaptation and biodiversity but also enhance the quality of life for residents.

The tool is based on a "Green Factor Calculation" which is broken down as follows;

- Criteria Selection: The tool incorporates a variety of criteria related to green and sustainable development. These criteria might include the proportion of green space, types of vegetation, water management systems, energy efficiency measures, waste management strategies, and biodiversity enhancement techniques.
- Scoring System: Each criterion is assigned a score or weight based on its perceived importance and impact. For example, permeable surfaces might be rated for their effectiveness in managing stormwater, while green roofs might be scored on their contribution to biodiversity and insulation.
- Quantitative and Qualitative Evaluation: The tool evaluates projects on both quantitative measures (like the percentage of area covered by green spaces) and qualitative

contributions (such as aesthetic value or community benefit). This comprehensive approach ensures that projects contribute holistically to urban sustainability.

- **Thresholds and Incentives:** Projects must meet a minimum "green factor" score to be approved, encouraging developers to integrate as many green features as possible. Higher scores might be linked to incentives like tax breaks, grants, or expedited permitting processes.
- **Area-Based Measures:** This includes calculating the percentage of the site covered by vegetation, water bodies, or permeable materials. Each type of coverage might have a different score based on its environmental benefit, with special emphasis on native species and biodiversity.
- **Performance-Based Measures:** Energy efficiency, water conservation, and waste reduction measures are scored based on their expected performance. This might include the installation of solar panels, rainwater harvesting systems, or composting facilities.

3.5. Germany Experience

Germany, a key player in the pursuit of a greener future, has implemented various initiatives to empower SMEs in adopting environmentally friendly technologies and practices. Two of these initiatives stand out;

- Umwelt innovations programm (UIP)
- Energie forschungs programm (EFP)

1. Umweltinnovations programm (UIP):

The Umwelt innovations Program (UIP), meaning "Environmental Innovation Program," is a flagship initiative by the German government to empower small and medium-sized enterprises (SMEs) in adopting groundbreaking environmental technologies. Launched in 1979, UIP has a rich history of fostering pioneering solutions with the potential to revolutionize various sectors and contribute significantly to environmental protection³.

The Umwelt Innovations Program (UIP) provides comprehensive support for MSMEs venturing into green technologies. With financial grants of up to €500,000, covering half of the eligible project costs, the program significantly eases the financial burden associated with developing innovative environmental solutions. Beyond funding, and what is worth noting in regard to the Granting Facility;

³ <https://www.umweltinnovationsprogramm.de/>

- **Technical Support:** UIP offers invaluable technical expertise, guiding SMEs through project design, technology evaluation, and implementation. This ensures that businesses possess the necessary knowledge to navigate the green technology landscape successfully.
- **Networking:** Moreover, the program facilitates networking opportunities, creating a collaborative environment for SMEs, researchers, and stakeholders to share experiences, identify potential partners, and stay informed about emerging trends.
- **Competition and Awarding:** UIP goes a step further by supporting demonstrations of successful green technologies, showcasing their viability and benefits. This not only helps persuade other businesses and investors but also accelerates the widespread adoption and market integration of these eco-friendly solutions.

2. Energie forschungs programm (EFP):

The Energie forschungs programm (EFP), or Energy Research Program, is a pivotal initiative by the German government aimed at advancing sustainable energy solutions. Established in 1977, EFP focuses on supporting research and development (R&D) projects in renewable energy and energy efficiency, extending its benefits to both large corporations and Small and Medium-sized Enterprises (SMEs). For SMEs, EFP offers funding opportunities for R&D endeavors, enabling exploration of innovative applications and optimization of existing technologies⁴.

3.6. Singapore Experience

Singapore boosts multiple projects and initiatives that have assisted the country in transforming into a leading global green economy, in relation to the Granting Facility, two are worth exploring:

- Energy Efficiency Grant (EEG)
- The Enterprise Sustainability Programme (ESP)

1. Energy Efficiency Grant (EEG)

The Energy Efficiency Grant (EEG) has been a flagship for many Singaporean SMEs looking to reduce their energy consumption and operating costs. Launched in September 2022 by Enterprise Singapore, the EEG specifically targets businesses in the food services, food manufacturing, and retail sectors. This prioritization has assisted the Grant in achieving significant and targeted milestones⁵.

⁴ <https://www.energiesystem-forschung.de/>

⁵ <https://www.enterprisesg.gov.sg/financial-support/energy-efficiency-grant>

The EEG provides financial support to MSMEs in Singapore aiming to adopt energy-efficient equipment. Through co-funding, the EEG covers up to 70% of the costs associated with adopting pre-approved energy-efficient equipment, such as;

- LED lighting
- Air conditioners
- Cooking hobs
- Refrigerators
- Water heaters
- Clothes dryers

This reduces the initial investment burden, making green technology more accessible for SMEs. The EEG specifically focuses on equipment meeting stringent energy efficiency standards, ensuring significant energy savings for participating businesses. These energy-efficient choices lead to long-term benefits, including reduced electricity bills, enhancing profitability and competitiveness. Moreover, the EEG contributes to environmental goals by supporting SMEs in lowering their carbon footprint, aligning with Singapore's sustainability objectives. The program also aids in resource conservation by alleviating strain on the power grid and other resources through lower energy consumption.

2. The Enterprise Sustainability Programme: A Green Boost for Singaporean SMEs

Launched in 2023, the Enterprise Sustainability Programme (ESP) by Enterprise Singapore is a comprehensive initiative aimed at supporting Singaporean Small and Medium-sized Enterprises (SMEs) on their sustainability journey. The program offers a diverse set of tools and resources, including sustainability courses covering topics like decarbonization and waste management. For project funding, SMEs can access the Enterprise Development Grant (EDG), providing up to 70% funding for projects related to green technology upgrades and resource efficiency. Additional co-funding opportunities further maximize financial support. ESP also focuses on ecosystem building, connecting businesses through the Sustainability Champions Network and fostering partnerships with industry associations for tailored sector-specific support. Highlighting success stories, companies like GreenGo and Ecosmith have utilized the ESP to develop sustainable solutions, reducing their carbon footprint, attracting new customers, and achieving environmental benefits⁶.

⁶ <https://www.enterprisesg.gov.sg/resources/all-faqs/enterprise-sustainability-programme>



4. Green Economy and Green Energy: Challenges

While the transformation into a green economy through the adoption of green energy and sustainability principles is beneficial to East Jerusalem's MSMEs, there are still bottlenecks and challenges hindering this process. The insights provided by the initial report, coupled with the research undertaken in this current study, cast light on a spectrum of challenges that span the general to the particular. Each industry faces its unique set of obstacles that can stall or derail the greening process. This chapter aims to not only extrapolate upon the foundational research previously conducted but also to provide a focused analysis of the specific challenges that businesses across various sectors confront. As such, acknowledging the general challenges faced as well as the business-specific ones, the chapter is divided into; (i) General Challenges, and (ii) Business-Specific Challenges.

4.1. General Challenges Facing All Sectors

4.1.1. Financial Constraints

One of the primary hurdles facing MSMEs is the initial investment required for green technology and infrastructure. Despite potential long-term savings, the upfront costs can be prohibitive, particularly for smaller businesses operating with limited capital. However, while prominent for the green economy integration within East Jerusalem, this issue is not within the scope of the Green Energy and Sustainability Granting Facility.

4.1.2. Green Washing

Greenwashing is the practice where organizations, in an attempt to appear environmentally responsible, make unsubstantiated or misleading claims about the sustainability or environmental impact of their products, services, or practices. This can range from vague assertions to complete fabrications that a company's initiatives are environmentally friendly.

Greenwashing not only misleads consumers and stakeholders but also undermines genuine efforts toward sustainability. It can create a false impression of environmental stewardship, allowing businesses to reap the benefits of a "green" image without making a meaningful contribution to environmental protection. This is particularly problematic for grant programs focused on sustainability, as it diverts limited resources away from projects that could have a significant, verifiable positive impact.

For a facility like the Green Energy and Sustainability Granting Facility, which aims to support the transition to a green economy, greenwashing poses a significant threat. It can lead to the misallocation of funds to projects that do not effectively contribute to the stated goals of energy efficiency, carbon footprint reduction, or sustainable resource use, diluting the impact of the facility's investments.

4.1.3. Occupation Policies

Specific to the context of East Jerusalem, the Israeli Authorities have proven to implement discriminatory policies against the Arab Residents of East Jerusalem, and East Jerusalem as whole. The challenges have been detailed in the first report including a comparison of demolition orders for East Jerusalem compared to West Jerusalem, the segregation barrier, and the inevitable result of relocation of various businesses to outside the wall and even to other cities in the West Bank.

The overarching challenges encountered significantly hinder the city's capacity to transition its Micro, Small, and Medium Enterprises (MSMEs) toward a more sustainable and environmentally friendly economic model. Various factors, such as stringent regulations governing construction and expansion, coupled with the economic repercussions faced by the tourism and industrial sectors, have impeded their ability to embrace greener practices. For these sectors, embracing eco-friendly initiatives often appears as a luxury, given their primary focus on day-to-day operations and the paramount goal of ensuring the financial stability of their enterprises. This predicament is exemplified by the thriving tourism sector in West Jerusalem, which has thrived at the expense of its eastern counterpart, where the challenges to pursue environmentally conscious strategies remain pronounced.

Access to land is another critical issue. The classification of land and the establishment of green zones or nature reserves by Israeli authorities often limit the available space for agricultural development or other green economy ventures. This, in turn, can impede local food production and the development of sustainable agricultural practices, which are key components of a green economy.

Israeli policies have also led to underinvestment in infrastructure and services in Palestinian neighborhoods of East Jerusalem. This underinvestment includes inadequate waste management and water supply services, which are essential components of a sustainable urban environment. Without proper waste management, initiatives to promote recycling and reduce pollution face significant obstacles.

Additionally, there is an asymmetry in economic development initiatives between the Israeli and Palestinian populations, with Palestinian businesses typically having less access to the financial and institutional support, such as the Municipality Financing, needed to transition to green operations. This includes less access to grants, loans, and technical expertise that could facilitate the adoption of sustainable practices.

4.1.4. Market Demand

There may be insufficient market demand for greener products or services, particularly if consumers are not aware of the benefits or if there is a significant price differential compared to non-green alternatives.

4.1.5. Cultural Change and Lack of Capacity

Shifting cultural norms and behaviors to support a green economy can be challenging. This includes changing consumer behaviors as well as internal organizational culture within businesses. Additionally, there is a skills gap in many sectors, where employees and management may not have the necessary knowledge or training to implement green practices effectively.

4.1.6. Measurement and Verification

Difficulty in measuring and verifying the impact of green practices can deter businesses from adopting them, particularly if the benefits are not immediately apparent.

4.1.7. Energy Infrastructure

On November 30th, 2023, a consultation was held with JDECO in regard to the Granting Facility and the adoption of renewable energy solutions in the city of Jerusalem. JDECO's policies in East Jerusalem have been stated to be flexible, and residents as well as MSMEs do not require any additional permissions other than JDECO's technical approval for the installation of solar energy (PV) systems. Nevertheless, a key issue is relevant to the existing grid, where not all localities have the needed grid capacity to allow for solar systems' installations. These are often dependent on JDECO's site visits and technical examination of the site and its existing infrastructure. Additionally, looking at the Israeli renewable energy metrics, it can be seen that Jerusalem (Western and Eastern) have only utilized 5% of its solar energy potential, most of which is located in West Jerusalem⁷.

4.2. Sector and Business Specific Challenges

While the adoption of green economy and energy initiatives poses various challenges among different sectors, these are to a degree common despite the nature of the sector or enterprise within. However, some sectors have their own intricacies that need to be factored in during developing solutions that could be implementable, feasible, and assist the MSMEs of East Jerusalem in integrating green economy principles. For ease of reference, the challenges have been portrayed in a similar manner as was done in table 2.

7

<https://app.powerbi.com/view?r=eyJrljoiYmNjY2I5ZmMtYTUxYi00YjZhLWFmZTk0OTgyMzE4MDkzZDNmliwidCI6ImUxYjY2OThlLTlhMTQtNDNkOC05ZWJhLTUzNDBiZjc5MDkxMCIslmMiOjI9>

Table 3: Summary of Sector and Enterprise-Specific Challenges

CATEGORY	PRIORITY SECTORS					NON-PRIORITY SECTORS	
SECTOR	MANUFACTURING	TOURISM	SERVICES	CIVIL SOCIETY	AGRICULTURE	WHOLESALE AND RETAIL TRADE	CONSTRUCTION AND HOUSING SECTOR
SECTOR SPECIFIC CHALLENGES	<ul style="list-style-type: none"> ➤ Limited market demand where sustainable production holds no value compared non-sustainable one ➤ Grid Capacity for Solar Energy ➤ Inefficient production processes 	<ul style="list-style-type: none"> ➤ Regulatory and political constraints ➤ Infrastructure limitations including the ages of the buildings ➤ Cost-benefit mismatch (no immediate results) ➤ Consumer awareness and social dynamics ➤ Capacity and knowledge ➤ Marketing and communication ➤ Lack of sustainable transport options (e.g., E.Vs) 	<ul style="list-style-type: none"> ➤ Green Washing ➤ Grid Capacity for Solar Energy ➤ Low impact of high investment cost (e.g. EVs) ➤ Energy inefficiency ➤ Unsustainable transportation ➤ Capacity and knowledge ➤ Lack of baseline knowledge (e.g. energy audits) ➤ Lack of area for systems such as solar 	<ul style="list-style-type: none"> ➤ Access to finance ➤ Risks associated with the continuity of the NGO itself (Scalability and continuity) ➤ Limited capacity ➤ Operational priorities ➤ Lack of knowledge, capacity, and resources ➤ Infrastructure deficits <p>**Education and Health are addressed under the services sector</p>	<ul style="list-style-type: none"> ➤ Lack of information and data ➤ Restrictions by Israeli authorities and informalization of the sector ➤ Marginalization ➤ High potential for green economy yet poor support ➤ Extreme lack of knowledge and capacity ➤ Demand driven ➤ Priority focused (day to day operations) ➤ Access to land and resources ➤ Lack of new tech. integration 	<ul style="list-style-type: none"> ➤ Limited solutions to be integrated ➤ Low impact ➤ Infrastructure limitations (Especially in the Old City) ➤ Consumer awareness and demand (no difference to the consumer) ➤ Cost-benefit mismatch (no immediate results) ➤ Market fragmentation (small and scattered solutions will be needed) ➤ High energy dependency 	<ul style="list-style-type: none"> ➤ Low impact for low investments, needs high investments to yield results ➤ High risk ➤ Lack of knowledge and expertise ➤ Increased cost on end-consumers (residents) ➤ General infrastructure limitations including electricity ➤ Market dynamics for EJ market (basic necessities driven) ➤ Zoning restrictions
ENTERPRISE SPECIFIC CHALLENGES	<p>1. Manufacturing of Furniture and Wood</p> <ul style="list-style-type: none"> ➤ Access to Green Technologies ➤ Access to sustainable material ➤ Waste Management 	<p>1. Accomodation (Hotels and Hostels)</p> <ul style="list-style-type: none"> ➤ Historical preservation (not all installations are feasible) ➤ Limited Spaces 	<p>1. Office Based Intangible Services</p> <ul style="list-style-type: none"> ➤ Existing buildings' efficiency ➤ Paper based operations and lack of digitalization* ➤ Energy inefficiency 		<p>1. Livestock</p> <ul style="list-style-type: none"> ➤ Space constraints ➤ Regulatory constraints ➤ Waste management 	<p>1. General Wholesale and Retail Trade (incl. Motor Vehicles and Motorcycles)</p>	<p>1. Construction of Buildings</p> <ul style="list-style-type: none"> ➤ Regulations ➤ Cost of technology and sustainable material integration

<ul style="list-style-type: none"> ➤ Utilizing Sustainable production techniques like water-based paints ➤ Resistance to technology upgrades ➤ Inefficient water use 	<ul style="list-style-type: none"> ➤ High initial cost needed ➤ Infrastructure limitations ➤ Capacity and knowledge ➤ Market competitiveness 	<ul style="list-style-type: none"> ➤ Travel and Commuting ➤ Awareness and capacity ➤ Old and energy consuming machinery and equipment ➤ Green washing 			<ul style="list-style-type: none"> ➤ Market access (outside and inside the wall) ➤ Traditional practices 	<ul style="list-style-type: none"> ➤ Shares general challenges with the sector as described above, with economic viability as a main concern in addition to waste management. 	<ul style="list-style-type: none"> ➤ Perception (considered a "Luxury") ➤ Skill and knowledge gap ➤ Market demand ➤ Verification and certification of green buildings ➤ Lack of policy support ➤ Need of strategic interventions ➤ Infrastructure needs and constraints
<p>2. Manufacturing of Apparels and Textiles</p> <ul style="list-style-type: none"> ➤ Substituting chemicals ➤ Reducing water consumption ➤ Textile waste 	<p>2. Restaurants, Cafes, and Food & Beverage Establishments</p> <ul style="list-style-type: none"> ➤ Inefficient energy consumption ➤ Waste management ➤ Knowledge and capacity ➤ Financial constraints ➤ Building infrastructure ➤ Green washing 	<p>2. Transportation and Storage</p> <ul style="list-style-type: none"> ➤ Aging and high polluting vehicles ➤ Even with EV, a risk is related to the source of electricity (non-renewable) ➤ High cost of upgrading storage facilities ➤ Low Economic viability for storage solutions ➤ Public perception and demand 					
<p>3. Manufacturing of Metals, Plastics, and Chemicals</p> <ul style="list-style-type: none"> ➤ Large waste and no recycling ➤ Chemicals usage ➤ High energy consumption 	<p>3.Arts, Sports, and Recreational Activities</p> <ul style="list-style-type: none"> ➤ Infrastructure modernization needs ➤ High investment cost ➤ Regulatory challenges ➤ Need for capacity building and continuous support ➤ Space utilization and engineering 	<p>3. Health and Social Work</p> <ul style="list-style-type: none"> ➤ Resources prioritization on over long-term investments ➤ High energy consumption ➤ High standards for hygiene and safety ➤ Infrastructure challenges ➤ Regulatory constraints ➤ Waste issues, especially hazardous waste 			<p>2. Plant Production</p> <ul style="list-style-type: none"> ➤ Input supplies such as organic fertilizers and pesticides are expensive ➤ lack of knowledge ➤ traditional processes ➤ demand driven ➤ lack of standards and certifications ➤ economic marginalization 	<p>2. Repair of motor vehicles and motorcycles</p> <ul style="list-style-type: none"> ➤ Technical knowledge and expertise ➤ Access to greener products ➤ Operational costs ➤ Waste management and recycling 	



			<ul style="list-style-type: none"> ➤ Inefficient resources use 		<ul style="list-style-type: none"> ➤ climate change ➤ infrastructure ➤ technology integration ➤ market access 		<ul style="list-style-type: none"> ➤ Consumer demand and awareness ➤ Lack of investment-specific diagnosis
	<p>4. Other Manufacturing Industries (General incl. food and beverage)</p> <ul style="list-style-type: none"> ➤ High water consumption ➤ Large quantities of wasted product from inefficient processes ➤ High quantities of wasted packaging material 		<p>4. Education</p> <ul style="list-style-type: none"> ➤ Usually finance constrained and unstable ➤ Large areas with poor utilization ➤ Outdated infrastructure ➤ Inefficient resource use ➤ Poor waste management ➤ Regulations 			<ul style="list-style-type: none"> ➤ Lack of investment-specific diagnosis ➤ No market differentiation ➤ Energy consumption and potential for renewable energy integration 	



5. Green Economy and Green Energy: Opportunities and Solutions

Opportunities and solutions within the green economy sphere represent a beacon of progress for East Jerusalem's MSMEs, offering a transformative path to overcome the environmental and economic challenges detailed earlier. This segment presents a curated set of practical strategies and interventions, carefully tailored to the unique context of East Jerusalem. These recommendations are designed to facilitate the integration of sustainable practices, enhance energy efficiency, and promote circular economic principles. They address the core needs and constraints of local enterprises, drawing upon both local insights and global best practices to foster an economically viable and environmentally responsible business ecosystem.

These opportunities while in part have unique characteristics relevant to each business and its sector, also share common grounds with other sectors, solutions such as solar energy and energy efficiency can stretch across the identified sectors. Accordingly, this chapter will initially outline the broad-based opportunities that span across diverse business types and sectors. Subsequently, it will delve into more specialized solutions tailored to the specific needs of the sectors and subsectors identified earlier, ensuring a holistic approach to sustainable economic development in East Jerusalem.

5.1. Thematic Solutions

In the pursuit of a sustainable and resilient economic future for East Jerusalem, it is imperative to identify solutions that transcend specific industry boundaries and offer wide-reaching benefits. This section outlines innovative, scalable, and adaptable green solutions that cater to a broad range of sectors, driving them towards a circular and green economy. These solutions are designed considering East Jerusalem's unique socio-political context, its economic fabric, and the overarching goal of sustainable development.

5.1.1. Solar Energy

East Jerusalem, as with the West Bank, receives around 3400 sunny hours per year, with over 300 sunny days in total. With its abundant sunlight, East Jerusalem presents a significant opportunity for solar energy adoption given that it is the only feasible renewable energy solution currently available and applicable. Solutions are not tied only to electricity generation, where factories requiring hot water as well as recreational activities such as saunas and spas can benefit from solar water heating solutions as well. Therefore, feasible generic solutions that can be applied for all the identified sectors in terms of solar energy include;

- **Photovoltaic (PV) Solar energy installations for electricity generation:** small systems that can cover part of the enterprises consumption, mainly through net-metering arrangements coordinated with JDECO.
- **Solar Powered Water Heating:** On site water heating panels that are connected with the building's plumbing system.

- **Solar Tracking Systems:** Use solar tracking systems to maximize energy capture by the solar panels throughout the day, increasing the efficiency of solar systems by 10 – 25%.

5.1.2. Water Efficiency and Rain Water Harvesting

In East Jerusalem, where water scarcity is exacerbated by geopolitical complexities and arid climate conditions, optimizing water use and enhancing water conservation practices are vital. Cross-sectoral solutions that can be adopted by the identified priority sectors include solutions that aim to reduce water consumption for sectors such as tourism and recreational activities, as well as the manufacturing sector where the enterprises poses the needed area as well as capacity, these solutions include;

- **Rainwater Harvesting Systems:** Promote the installation of rainwater harvesting systems in commercial, industrial, and residential buildings. The facility can provide grants for the setup of gutters, storage tanks, and filtration systems.
- **Water-Efficient Appliances and Technologies:** Encourage the use of water-efficient toilets and faucets in businesses. Factories that rely on substantial water usage such as textiles and paper production can upgrade their equipment and machinery to include more water efficient processes.
- **Water Recycling and Reuse:** Support initiatives for greywater recycling systems, particularly in industries like hospitality and manufacturing where water can be reused for non-potable purposes. The facility can fund the initial setup and provide guidance on best practices and regulatory compliance.

Water efficiency solutions under each action identified above have their own intricacies under each sector, these are identified and explored in section 6.2 below.

5.1.3. Waste Management and Resource Recovery

effective waste management and recycling are vital components of a green economy, especially in densely populated areas like East Jerusalem where environmental health impacts community well-being. The 3Rs principle (Reduce, Reuse, and Recycle) form the basis of the circular economy integration, both in its technical and biological cycles. This section focuses on strategies to enhance waste reduction, management, reuse, and recycling in various sectors.

- **Waste Audits:** As part of the technical support that is suggested to be provided under the Granting Facility, along with water and energy audits, waste audits shall also be provided for large enterprises particularly, especially in the tourism and manufacturing sector. This helps to identify the primary types of waste produced and opportunities for reduction or recycling. Audits can lead to tailored waste management strategies that are both cost-effective and environmentally friendly.

An example provided for waste audits has been provided by UNIDO on a consultation conducted on the 23rd of December with Dr. Said Dweikat. He highlighted success stories conducted that did not involve any additional cost besides the audit. Where for some factories changing the storage patterns, operational procedures, and enhancing the management of resources yielded savings of 50,000 – 100,000\$ annually for several factories.

- **Prioritize Projects that fall within the core of Circular and Green Economy:** Projects that aim to utilize reuse, recycling, and reduction methods should be prioritized under the Granting Facility, these could include plastic recycling factories, composting, and paper production from recycled material.
- **Composting Organic Waste:** Promote composting as a means to turn organic waste from food businesses and hospitality, as well as agricultural activities into valuable compost for gardening and landscaping. Training and support should be included for setting up composting systems.
- **Reduction of Resource Utilization such as Single-Use Plastics and Paper:** Encourage businesses, especially in retail and food service, to reduce single-use plastic consumption. Support initiatives for reusable, biodegradable, or compostable alternatives and implement policies or incentives to discourage plastic use.
- **Sustainable Packaging:** Assist manufacturers and businesses in adopting and transforming to sustainable packaging solutions.

5.1.4. Energy Efficiency

Energy efficiency is a key component of sustainable development, especially for MSMEs in East Jerusalem, where the cost of energy can significantly impact business viability and competitiveness. The following include actions that can be applied across the identified sectors;

- **Energy Audits:** Include subsidies under the Granting Facility for businesses to conduct energy audits. These audits can identify specific areas where energy is being wasted and recommend cost-effective measures to improve efficiency. The facility might also facilitate partnerships with local energy auditors or technical experts.
- **Upgrading to Energy-Efficient Equipment:** Support the purchase and installation of energy-efficient appliances, machinery, and lighting systems. This could include modern HVAC systems, LED lighting, efficient refrigeration units, and other high-efficiency equipment relevant to the business's operations. Although an associated risk is green washing in this regard, solutions are further discussed in chapter 7 below.
- **Thermal Insulation Improvements:** Based on the energy and facilities audits, financial support could include enhancing the insulation of buildings, which can lead to significant energy savings, especially in heating and cooling. This might include upgrading windows, doors, roofs, and walls to more energy-efficient materials. Such savings could reach up to 50% in terms of energy efficiency.

- **Optimization of Production Processes:** Assist businesses in optimizing their production processes to be more energy-efficient. These solutions do not usually entail CAPEX or investment costs. This can involve re-engineering workflows, adopting just-in-time production methods, or implementing energy-efficient technologies in manufacturing processes.
- **Monitoring and Control Systems:** Support the installation of energy management systems that allow businesses to monitor and control energy usage actively. These systems can provide real-time data and insights, enabling businesses to make informed decisions about their energy consumption.

5.1.5. Technical Support and Capacity Building

It is evident that the majority of needed interventions and the lack of their achievement internally by MSMEs and the private sector result from mainly the lack of financing capacity, an issue which the Granting Facility is a key stakeholder in resolving. The second part however, is relevant to these institutions' capacity and knowledge. Despite the fact that the Granting Facility provides substantial financial support to East Jerusalem's MSMEs, they still require guidance in choosing the right solution, applying for adequate, tangible, and effective ideas that ensure meeting the Granting Facility's objectives as well as maximizing the value of the provided grant. Hence, various solutions are suggested to support EJ's MSMEs including;

- **Include Technical Support in the Provided Grants:** Include technical support such as energy and water audits as part of the grant and not a separate component. Meaning that applicants can select technical support as part of their financing and not a stand-alone application.
- **Cooperation and Engagement:** Entities such as JDECO have stated that they provide energy audits, the PIF additionally through Masader can assist the Granting Facility in providing technical support to awarded enterprises.
- **Publicity and Marketing:** While the Granting Facility provides a conditional marketing grant to selected beneficiaries, such services should be firstly business oriented, and secondly should assist enterprises in show-casing and highlighting their sustainability efforts. This is very important for the tourism and manufacturing sectors.

5.1.6. Digital Transformation

Digital transformation and the shift towards Product-as-a-Service (PaaS) models are increasingly recognized as strategic levers for sustainability and efficiency, particularly for MSMEs. These approaches leverage technology to optimize resource use, reduce waste, and enhance service delivery. This section outlines how digital transformation and PaaS can be implemented to support sustainable business practices.

- **Digital Transformation Strategies: Cloud-Based Solutions:** Encourage the adoption of cloud computing services to reduce the need for physical consumption. Cloud solutions can increase operational efficiency, data storage, and access to advanced computing resources without

the overhead of maintaining physical servers. These remove the need for paper-based transactions.

Such interventions can be divided into firstly Research and Development (R&D) projects, which are listed as core-operations under green and circular economies and are to be supported despite the lack of needed equipment or machinery that can be purchased under the Granting Facility, it is advised here to increase their technical support component under the Granting Facility. The second part is to assist existing enterprises to purchase and integrate such systems into their operations, which as well requires an increased soft component grant. This is further discussed under the following chapter.

- **Smart Automation and Internet of Things (IoT):** Support the integration of smart automation and Internet of Things (IoT) technologies to optimize energy use, resource management, and operational processes. For instance, IoT-enabled sensors can monitor and adjust energy consumption in real-time, leading to significant savings.
- **Data Analytics and Optimization:** Provide access to data analytics tools that can help businesses analyze consumption patterns, optimize resource use, and improve decision-making processes. This can lead to more targeted and effective energy-saving measures and waste reduction strategies.

Such solutions can lead to operational efficiency, cost savings, new revenue streams, and market differentiation where opportunities for businesses to differentiate themselves in the market by offering innovative services and leveraging technology for enhanced customer engagement.

5.2. Sector and Enterprise Specific Solutions

Following exploring the cross-sectoral thematic interventions, it is necessary to discuss tailored solutions for each identified sector as well as their underlying businesses and enterprises. The transition towards a sustainable and resilient economy in East Jerusalem necessitates a precise and targeted approach, tailored to the unique challenges and opportunities of each sector. Sector and enterprise-specific solutions are vital for addressing the individual needs of businesses, enhancing their operational efficiency, and fostering innovation within the framework of environmental sustainability.

5.2.1. The Manufacturing Sector

In the manufacturing sector, it's recognized that enterprises, even within the same sub-sector, face their unique set of challenges and therefore require bespoke solutions. For instance, the operational demands and environmental impact considerations of soft drink producers differ significantly from those of dairy product manufacturers. Acknowledging this diversity, it's crucial to first outline general manufacturing solutions that can provide a foundational framework of sustainability and efficiency. These broad strategies are then complemented by more specialized solutions, tailored to the distinct needs and contexts of each business to ensure optimal relevance and impact.



1. Resource-Efficient Manufacturing Processes

- Introduce precision automation to reduce material usage and optimize energy consumption.
- Fund the adoption of advanced manufacturing technologies like 3D printing for prototypes and parts to minimize waste.

2. Sustainable Material Use

- support the use of recycled or biodegradable materials in the production process.

3. Energy Management Systems

- Facilitate the installation of smart energy management systems to monitor and optimize energy use.
- Invest in modern equipment designed to consume less energy without compromising output.

4. Water Conservation in Industrial Processes

- Water reuse through the establishment of closed-loop water systems.
- water-efficient technologies in processes where water is a critical resource.

5. Waste Minimization and Recycling

- on-site recycling systems where possible.
- Sell what is considered “waste” in some processes, which is raw material for others.

6. Eco-Design and Product Lifecycle Management

- Provide capacity building and technical support for the integration of eco-design principles.
- Offer consultancy and technical support on product lifecycle management to extend product lifespan and reduce waste.

7. Pollution Control Measures

- Inclusion of air and water pollution control systems to meet environmental regulations.

8. Upgrading Traditional Industries

- For sectors like stone cutting, include solutions to modernize machinery to reduce dust and improve water recycling methods.

5.2.1.1. Manufacturing of Wood and Furniture

1. Sustainable Sourcing of Materials

- Certified Wood: Encourage the use of sustainably sourced wood.
- Recycled and Reclaimed Wood: Promote the use of recycled or reclaimed wood materials in furniture production to reduce the need for new product.

2. Eco-Friendly Finishes and Adhesives

- Low-VOC Products: Support the transition to varnishes, adhesives, and paints that have low volatile organic compounds (VOCs) to improve indoor air quality and reduce harmful emissions.
- Natural Oil Finishes: Encourage the use of natural oil finishes that are less harmful to the environment and workers.

3. Waste Reduction and Management

- Wood Waste Recycling: Implement wood waste recycling programs where offcuts and sawdust are repurposed into new products, such as particleboards
- Utilize Precision Technologies: To minimize waste and cut remains.

4. Energy Efficiency in Production

- Efficient Machinery: Upgrade to more energy-efficient machinery that reduces energy consumption in woodworking processes.

5.2.1.2. Manufacturing of Apparels and Textiles

For apparel and textiles manufacturing, the following solutions are designed to address specific industry challenges, such as water and energy use, chemical management, and waste:

1. Water Efficiency

- Water-Saving Dye Technologies: Implement advanced dyeing technologies that reduce water consumption, such as air-dyeing or digital printing techniques.
- Wastewater Treatment: For textile manufacturing, set up on-site wastewater treatment plants that enable water recycling and ensure environmental regulations compliance.

2. Energy Efficiency

- Efficient Equipment: Transition to energy-efficient machinery for sewing, weaving, and other textile processing operations that require less power.
- Energy Audits: Conduct energy audits to identify areas that could utilize enhancement through management change without the need of capital expenditure.

3. Sustainable Materials

- Organic Fibers: Encourage the use of organic cotton or other sustainable fibers that require fewer pesticides and fertilizers during cultivation.
- Recycled Fabrics: Utilize fabrics made from recycled materials, such as recycled polyester or upcycled textiles, reducing reliance on virgin resources.

4. Chemical Management

- Non-Toxic Chemicals: Shift to non-toxic and environmentally friendly chemicals for processing and finishing.

- Chemical Use Reduction: Adopt processes that reduce the volume of chemicals required or that can use alternative, less harmful substances.

5. Waste Reduction

- Zero-Waste Design: Incorporate zero-waste design principles to utilize the entire width of fabric and minimize cutting waste.

6. Eco-Labeling and Consumer Education

- Product Labeling: Provide eco-labeling on garments to inform consumers about the sustainable attributes of the apparel.

7. Circular Economy Business Models

- Take-Back Schemes: Implement take-back or recycling programs for end-of-life garments to promote circularity within the textiles sector.

5.2.1.3. Manufacturing of Metals, Plastics, and Chemicals

For the manufacturing of metals, plastics, and chemicals sub-sector, sustainability solutions should emphasize resource efficiency, pollution control, and safe materials handling. Targeted strategies include;

1. Resource and Energy Efficiency and Recovery

- Recycling Programs: comprehensive recycling programs for scrap metal and plastic waste, enabling these materials to be reused in production.
- Energy and Resource Recovery: Include closed loop systems for water and utilize heat sources for heating.
- Heat Recovery: Capture waste heat from processes for use in heating facilities or in other stages of production, improving overall energy efficiency.
- Smart Energy Systems: Utilize smart energy management systems to track and optimize energy usage in real-time.
- Renewable Energy Sources: Where feasible, incorporate renewable energy sources, such as solar PV systems, into operations to reduce reliance on non-renewable energy.

2. Process Optimization

- Energy-Efficient Processes: Upgrade to energy-efficient production processes, including the use of high-efficiency furnaces in metal manufacturing or injection molding machines in plastics manufacturing.
- Process Redesign: Redesign chemical processes to reduce the use of hazardous substances and improve energy and resource efficiency.

3. Sustainable Material Alternatives

- Environment friendly raw material: Explore the use of environment friendly plastics or other sustainable materials that can replace traditional plastics in certain applications.
- Green Chemistry: Apply principles of green chemistry in product development to minimize the use and generation of hazardous substances.

5.2.2. The Tourism Sector

Sustainable tourism not only conserves resources and respects local culture but also enhances the visitor experience. This sector holds significance due to its historical importance and integration within the fabric of East Jerusalem's socio-economy. The integration of sustainability and green economy principles could provide areas for boosting its economic contribution;

5.2.2.1. Accommodation (Hotels and Hostels)

1. Energy Efficiency

- Smart Room Systems: Install smart room energy management systems that control lighting, heating, and air conditioning based on occupancy.
- LED Lighting: Replace all lighting with LED alternatives to significantly reduce energy consumption.

2. Water Conservation

- Low-Flow Fixtures: Fit all guest rooms and communal areas with low-flow faucets, showerheads, and toilets to minimize water usage.
- Water Recycling Systems: Implement greywater recycling systems for use in gardens or toilet flushing.

3. Sustainable Sourcing

- Eco-Friendly Amenities: Provide guests with eco-friendly toiletries and amenities, such as biodegradable shampoos and soaps.
- Locally Sourced Products: Use locally sourced food and beverages in hotel restaurants and cafes to reduce carbon footprint and support local producers.

4. Waste Management

- Comprehensive Recycling: Establish comprehensive recycling programs for paper, glass, metal, and plastic within the hotel premises.

5. Building and Renovation

- Green Building Standards: For new constructions or renovations, adhere to green building standards such as LEED or BREEAM.

- Insulation and Glazing: Improve building insulation and window glazing to maintain temperature and reduce the need for heating and cooling.

6. Renewable Energy Sources

- Solar Water Heating: Install solar water heating systems to provide hot water for guest use.
- Photovoltaic Panels: Consider the installation of photovoltaic panels on rooftops to generate electricity for hotel operations.

7. Certification and Marketing

- Sustainability Certification: Pursue sustainability certifications that can be used in marketing to attract environmentally conscious travelers.

5.2.2.2. Restaurants, Cafes, and Food & Beverage Establishments

For the sub-sector of restaurants, cafes, and food & beverage establishments in East Jerusalem, sustainability solutions should focus on reducing the environmental footprint, conserving resources, and enhancing the overall sustainability of operations.

1. Efficient Kitchen Operations

- Energy-Efficient Appliances: Use ENERGY STAR-rated kitchen appliances to reduce energy consumption.
- Smart Kitchen Management Systems: Implement systems that optimize kitchen operations, reducing energy and water usage.

2. Sustainable Food Sourcing

- Certified Organic and Fair-Trade Products: Offer dishes made from organic and fair-trade-certified products to support sustainable agriculture and fair labor practices.

3. Water Conservation

- Water-Saving Equipment: Install water-efficient dishwashers and pre-rinse spray valves to minimize water usage.
- Rainwater Harvesting: Utilize rainwater harvesting systems for non-potable water uses, such as irrigation for outdoor spaces or cleaning.

4. Waste Reduction and Management

- Composting: Set up composting systems for organic waste, converting it into fertilizer for local gardens or farms.
- Recycling Programs: Implement a robust recycling program to manage glass, cardboard, plastics, and metals effectively.

5. Energy Conservation

- LED Lighting: Transition to LED lighting in dining and kitchen areas for energy savings.
- Smart Thermostats: Use smart thermostats to efficiently manage heating and cooling.

6. Green Dining Experience

- Reusable or Compostable Tableware: Replace disposable tableware with reusable or compostable options to reduce waste.
- Digital Menus: Use digital menus or menu boards to eliminate paper waste and allow for easy updates.

7. Sustainable Packaging for Takeaway

- Eco-Friendly Packaging: For takeaway and delivery services, use packaging that is recyclable, compostable, or made from recycled materials.

8. Green Certifications

- Sustainability Certifications for Restaurants: Aim for sustainability certifications that can be displayed to inform and attract customers interested in supporting eco-friendly businesses.

5.2.2.3. Arts, Sports, and Recreational Activities

In the arts, sports, and recreational activities sub-sector, sustainability solutions must foster a respect for cultural and natural resources, promote energy conservation, and encourage community engagement.

1. Sustainable Event Planning

- Digital Ticketing and Programs: Reduce paper waste by offering digital ticketing options and online event programs.

2. Energy Conservation in Facilities

- Energy-Efficient Lighting and Equipment: Use LED lighting and energy-efficient equipment in venues, studios, and recreational facilities.
- Solar Power: Install solar panels on facilities to power lighting and electronic equipment, reducing reliance on non-renewable energy sources.

3. Water Conservation

- Water-Saving Fixtures: Equip facilities with water-saving fixtures in restrooms and showers, and use drought-resistant landscaping for outdoor areas.
- Rainwater Harvesting: Implement rainwater harvesting systems for maintaining green spaces associated with sports and recreational facilities.

4. Waste Management

- Recycling and Composting: Set up recycling stations and composting facilities at venues to manage waste generated from events and daily operations.
- Reusable Supplies: Use reusable cups, plates, and utensils for events to minimize single-use waste.

5. Green Spaces for Sports and Recreation

- Eco-Friendly Maintenance: Maintain sports fields and recreational areas using organic fertilizers and pesticides, and practice eco-friendly landscaping.

5.2.3. The Services Sector

The services sector encompasses a diverse range of businesses that contribute significantly to the economy of East Jerusalem. Tailoring sustainability solutions for this sector involves considering the unique operational characteristics of service-based enterprises.

5.2.3.1. Office- Based Intangible Services Subsector

The office-based intangible services subsector encompasses a range of businesses, including law firms, accounting services, consulting agencies, IT companies, and other professional services that primarily offer expertise and knowledge. For these businesses, sustainability efforts are often centered around minimizing the environmental impact of office operations.

1. Digital and Cloud-Based Solutions

- Paperless Systems: Transition to paperless systems using digital workflows, electronic signatures, and cloud storage to minimize paper use and waste.

2. Energy Management

- Smart Office Lighting: Implement smart lighting systems with LED lights and motion sensors to reduce electricity use.
- Procurement of Energy Efficient Equipment: While most new office equipment are energy efficient by default ensure adhering to ENERGY-STAR and selecting the highest efficiency.

3. Sustainable Transportation

- Company Cars: If company vehicles are necessary, ensure they are fuel-efficient or electric models.

5.2.3.2. Transportation and Storage

For the transportation and storage, sustainability solutions need to focus on reducing emissions, improving energy efficiency, and optimizing logistics.

1. Vehicle Modernization

- Electric Vehicles (EVs): Where possible, introduce electric vehicles and set up charging stations at key locations.
- Charging Stations with Solar Energy: Ensure that on-site charging stations are PV powered, this helps significantly enhance the feasibility of EVs and their long-term impact.

2. Route Optimization

- GPS and Route Management Software: Utilize advanced GPS tracking and route management software to optimize delivery routes, reducing fuel consumption and improving delivery times.

3. Energy-Efficient Warehousing

- Smart Warehousing: Implement smart warehouse technologies that optimize energy use, such as automated LED lighting systems and energy-efficient HVAC.
- Solar Panels: Install solar panels on warehouse roofs to generate renewable energy for storage operations.
- Temperature-Controlled Storage: Optimize temperature-controlled storage systems to be energy-efficient, especially in the cold chain for perishable goods.
- Electric Forklifts: Use energy-efficient material handling equipment, such as electric forklifts.

4. Packaging Optimization

- Eco-Friendly Packaging: Use recyclable or biodegradable packaging materials to reduce waste.
- Packaging Reduction: Employ strategies to minimize packaging without compromising product protection.

5.2.3.3. Health and Social Work

For the health and social work subsector sustainability solutions need to focus on both environmental and social aspects, ensuring the health sector reduces its footprint while continuing to provide essential services.

1. Energy Efficiency in Healthcare Facilities

- Energy Audits: Conduct energy audits in healthcare facilities to identify opportunities for energy savings.
- Efficient Medical Equipment: Invest in energy-efficient medical equipment and appliances.

2. Water Conservation

- Water-Saving Fixtures: Install water-saving fixtures in all healthcare facilities to reduce water usage.

- Water Reuse Systems: Implement systems to reuse water for non-potable purposes, like landscaping or flushing toilets.

3. Waste Management

- Proper Segregation of Waste: Ensure proper segregation of medical waste, including sharps, pharmaceuticals, and non-hazardous waste, for appropriate disposal or recycling.
- Safe Disposal of Hazardous Waste: Use environmentally sound methods for the disposal of hazardous medical waste to prevent pollution.

4. Sustainable Building Design

- Green Building Standards: Design new healthcare facilities or renovate existing ones according to green building standards.
- Natural Light and Ventilation: Make use of natural light and ventilation to reduce energy consumption.

5. Transportation for Healthcare Services

- Efficient Patient Transport: Use fuel-efficient or electric vehicles for patient transport services.

5.2.3.4. Education

The education sector has the potential to both provide tangible green energy and economy solutions, while also creating a culture of sustainability among students and future generations.

1. Installation of Solar Panels on Educational Institutions

- PV Solutions: Schools, colleges, and universities could install solar panels to generate their own clean energy, significantly reducing electricity costs and promoting renewable energy use among students and staff.

Similar projects have been implemented by the PIF through financing from the IFC. Current ongoing projects that should be engaged with further in this regard is Go-Solar, a project aiming to benefit schools in East Jerusalem through solar energy, implemented by the UNDP.

2. Energy Efficiency Upgrades

- Upgrading Fixtures and Equipment: Upgrade lighting, heating, cooling, and ventilation systems in educational buildings to more energy-efficient models. This could include transitioning to LED lighting, installing smart thermostats, and improving insulation.
- Energy Audits: The facility can support audits to identify energy inefficiencies and fund the necessary upgrades.

3. Student Engagement and Innovation

- Financing Student Led Projects: Encourage student-led initiatives and projects focused on sustainability, such as recycling programs, energy conservation campaigns, or innovation challenges. Provide grants for student or teacher-led projects that promote energy efficiency or renewable energy within the school community.

4. Energy Efficient Transportation for Schools

- EVs: Support the use of energy-efficient or electric vehicles for school transportation. This could be through funding the transition to eco-friendly school buses or electric shuttles.

5. Improving School Infrastructure

- Eco-Friendly Structures: Support the construction or renovation of school buildings to make them more energy-efficient and environmentally friendly. This can include better insulation, green roofing, and the use of sustainable materials.

5.2.4. The Civil Society Sector

Tailoring solutions for the civil society sector, particularly NGOs in East Jerusalem, requires alignment with the specific scope and resources provided by the Green Energy and Sustainability Granting Facility. Notably, the civil society sector, especially in fields like health and education, is closely intertwined with the services sector. These entities often manage and operate various community-oriented and social welfare projects, making them pivotal in driving sustainable development in their communities. Solutions must enhance their operational efficiency, community impact, and sustainability:

1. Solar Power Adoption

- Installation of Solar Energy Systems: photovoltaic panels and solar water heaters to reduce electricity costs and support sustainable energy use.

2. Efficient Infrastructure Modernization

- Eco-Friendly Equipment and Infrastructure Upgrades: energy-efficient appliances and green renovations to reduce energy consumption and promote long-term sustainability.
- Building Improvements: Provide grants for infrastructural upgrades for energy efficiency, such as improved insulation, efficient lighting, and HVAC systems. Support the adoption of green building standards.

3. Waste Reduction and Recycling

- Recycling and Waste Management Initiatives: establishment or enhancement of recycling programs and purchase of recycling equipment. These provide on-site learning experience for the community and reduce the waste generation from these NGOs operations.

4. Technology for Green Operations

- Greening NGO Operations through Technology: Facilitate the adoption of energy-efficient technology and digital tools to minimize environmental impact.

5. Water Conservation Strategies

- Water Efficiency Solutions: Fund water-saving fixtures and rainwater harvesting systems to promote water conservation.

6. Empowering Community Green Projects

- Community Project Development Grants: assist NGOs to initiate or support community-based sustainability projects and green enterprise incubation.
- Community-Based Projects: Support initiatives that involve the community in sustainable practices, such as community gardens, recycling projects, or educational campaigns.
- Greenwashing Avoidance: Set clear criteria for what constitutes a green project and require third-party verification of green claims to prevent greenwashing.

7. Energy Management and Optimization

- Energy Audits and Green Consultancy Services: Offer funding for energy audits and access to consultancy services to guide NGOs in energy-saving practices.

8. Outreach and Engagement Enhancement

- Marketing and Awareness Campaigns: Support marketing efforts and awareness campaigns to promote the NGO's sustainability initiatives and community education.
- Technical Training: Facilitate workshops and training in green technologies, sustainable practices, and policy advocacy to build the internal capacity of NGOs.

9. Fostering Innovation and Creativity

- Hackathons and Innovation Competitions: Sponsor events to encourage innovative solutions for energy and environmental challenges affecting NGOs and communities.

10. Creating Collaborative Green Spaces

- Eco-Hubs and Collaborative Spaces: Support the development of spaces where NGOs and communities can collaborate on sustainability initiatives and share resources.

5.2.5. The Agricultural Sector

The agricultural sector, particularly in marginalized areas like East Jerusalem, faces unique challenges that require thoughtful, sustainable, and innovative approaches. Despite the lack of data and support, agriculture is a critical component of the green economy, offering potential for environmental sustainability, economic development, and community resilience.

5.2.5.1. Plant Production

1. Efficient Water Use and Irrigation Systems

- Precision Irrigation Technology: Implement drip irrigation and other water-efficient technologies to maximize water use efficiency and minimize wastage.
- Rainwater Harvesting Systems: Set up systems to collect and store rainwater for agricultural use, reducing dependence on scarce water resources.
- Low-Volume Watering: Implement low-volume drip irrigation to deliver water directly to the plant roots, significantly reducing evaporation and water wastage.
- Pressure-Compensating Emitters: Utilize pressure-compensating emitters to ensure uniform delivery of water despite changes in pressure, improving water use efficiency across varied terrains.
- Fertigation Integration: Integrate fertigation systems to supply dissolved fertilizers through the irrigation system, enhancing nutrient uptake and reducing fertilizer runoff.

2. Renewable Energy Integration

- Solar-Powered Operations: Introduce solar-powered pumps and equipment to reduce energy costs and increase sustainability in farming operations.
- Biomass and Biogas Solutions: Promote the use of agricultural waste to produce biomass energy or biogas, providing a sustainable energy source and reducing waste.
- Solar Tracking Systems: Use solar tracking systems to maximize energy capture by the solar panels throughout the day, increasing the efficiency of solar pumps.

3. Sustainable Soil Management

- Composting and Soil Amendment Programs: Support the creation of compost from organic waste to enrich soil and reduce the need for chemical fertilizers.

4. Integrated Pest Management (IPM)

- Biological Control Methods: Promote the use of natural predators or biopesticides to manage pests sustainably.

5. Crop Diversification and Resilience Building

- Diverse Crop Selection: Encourage the cultivation of a variety of crops, particularly indigenous and drought-resistant varieties, to enhance biodiversity and resilience.
- Agroforestry Practices: Integrate trees and shrubs into agricultural land to improve productivity, soil quality, and carbon sequestration.

6. Market Access and Value Addition

- Value-Added Processing: Support small-scale processing units for products like olive oil, preserves, or herbal medicines to increase farmer income and product diversity.

7. Greenhouse and Controlled Environment Agriculture

- Modern Greenhouses: Support the construction of modern, energy-efficient greenhouses that allow for year-round production and better climate control.
- Vertical Farming Systems: Promote vertical farming in urban areas to maximize space efficiency and provide fresh produce close to consumers.

8. Community Supported Agriculture (CSA) and Cooperatives

- CSA Programs: Encourage the establishment of CSA programs where consumers invest in local farms in exchange for regular shares of produce, ensuring a stable market for farmers. These can be done and supported by NGOs.
- Farmer Cooperatives: Support the formation of cooperatives to pool resources, share knowledge, and improve bargaining power in the market. These are also interventions to be supported through NGOs.

9. Technology and Data for Smart Farming

- Agricultural Sensors: Utilize sensors for precision agriculture, providing data on crop health, soil conditions, and water needs.
- Remote Monitoring and Control: IoT-based solutions for remote monitoring and control of irrigation systems, allowing for adjustments based on real-time field data.

10. Hydroponics: Soilless Cultivation System

- Deep Water Culture: Implement deep water culture systems for rapid growth, where plants are suspended in aerated nutrient solutions, promoting faster development and higher yields.

11. Aquaponics: Integrated Fish and Plant Farming

- Closed-loop Ecosystem: Establish a symbiotic environment where fish waste provides nutrients for plants, and the plants filter and clean the water for fish.

5.2.5.2. Livestock

1. Precision Livestock Farming

- Automated Feeding Systems: Utilize automated feeders that provide the right amount of feed at the correct time, reducing waste and ensuring optimal nutrition for each animal.
- Environmental Control: Use advanced systems to regulate barn temperature, humidity, and ventilation, creating a comfortable environment that promotes animal health and productivity.

2. Nutrient Management

- Organic and Healthy Feed: Source healthy feed formulation that meets nutritional requirements while minimizing excess nutrients that can lead to waste and pollution.

- Manure Management Techniques: Implement manure management strategies such as composting, anaerobic digestion, or manure separation systems to reduce odors, pathogens, and greenhouse gas emissions.

3. Water Resource Management

- Water Recycling Systems: Implement systems to recycle and purify water from livestock operations for reuse, reducing overall water consumption.
- Rainwater Harvesting: Set up systems to collect and store rainwater for livestock drinking and operational use, especially in areas with limited water resources.

4. Renewable Energy Integration

- Biogas Production: Utilize anaerobic digesters to convert manure and other organic waste into biogas, providing a renewable energy source for heating or electricity generation.
- Solar Thermal Systems: Install solar thermal systems to provide hot water needed for cleaning and sanitizing equipment, reducing energy costs and reliance on non-renewable sources.

5. Efficient Use of By-Products

- Feed from By-products: Convert agricultural by-products into nutritious feed, reducing waste and feed costs.
- Manure as Fertilizer: Process and treat manure to produce organic fertilizer, enhancing soil fertility for crop production or sale to crop farmers.

6. Energy-Efficient Infrastructure Upgrades

- Insulation and Ventilation Systems: Funding for improved insulation materials and ventilation systems in animal housing to maintain optimal temperatures and reduce energy costs.
- LED Lighting: Grants for energy-efficient LED lighting systems in barns and outdoor areas to reduce electricity usage.

5.2.6. The Wholesale and Retail Trade Sector

This sector while comprising the most significant part of both the economic output as well as enterprises numbers in East Jerusalem faces limitations in green economy and energy integration due to its simple and standard nature of operations. Although not marked as a priority sector, if the Granting Facility is to support enterprises within this sector, the following could be implemented;

5.2.6.1. General Wholesale and Retail Trade (incl. Motor Vehicles and Motorcycles)

1. Energy-Efficient Lighting and Appliances

- LED Lighting Systems: Funding for replacing traditional lighting with energy-efficient LED lighting to reduce electricity consumption and costs. This is particularly effective for whole sale operations.

- High-Efficiency Appliances: Support for upgrading to energy-efficient refrigerators, freezers, and HVAC systems that lower energy bills and reduce carbon footprint. Conditional to show case actual impact and difference new equipment will make.

2. Solar Power Installations

- Rooftop Solar Panels: Grants to install photovoltaic panels on the rooftops of retail and wholesale outlets, reducing reliance on the grid and cutting energy costs.

3. Smart Inventory and Storage Solutions

- Energy-Efficient Storage: Grants for modern, energy-efficient storage solutions, including refrigerated units with better insulation and temperature control.
- Inventory Management Systems: Support for advanced inventory management software that reduces waste, optimizes stock levels, and improves order accuracy.

5.2.6.2. Repair of motor vehicles and motorcycles

1. Eco-friendly Facility Upgrades

- Solar-powered Workstations: Grants for installing solar panels to power lighting and equipment in repair shops.
- Facility Enhancement : Funding for retrofitting shops to include better insulation, efficient lighting, and energy efficient infrastructure.

2. Water and Energy Conservation

- Water Recirculation Systems: Support for systems that recycle water used in vehicle washing stations.
- High-efficiency Boilers and Heaters: Grants for modern, energy-efficient boilers and heaters to reduce energy consumption.

3. Waste Management Solutions

- Oil and Fluid Recycling: Funding for equipment that safely recycles used motor oil, antifreeze, and other fluids.

4. Sustainable Repair Practices

- Parts Refurbishing Equipment: Grants for machinery that refurbishes parts like brake pads, clutches, and gear sets instead of replacing them, reducing waste.
- Non-toxic Cleaning Agents: Funding for switching to non-toxic, biodegradable cleaning agents for parts and vehicles.

5. Advanced Diagnostics and Repair Technology

- Smart Diagnostic Tools: Support for advanced diagnostic tools that improve repair accuracy and efficiency, reducing unnecessary parts replacement and waste.

- Electric Vehicle (EV) Service Training and Equipment: Grants for specialized training and equipment to service EVs, keeping pace with the shift to electric transportation.

6. Renewable Energy Tools and Machinery

- Energy-efficient Tools: Funding for energy-efficient, battery-operated tools to reduce the shop's carbon footprint.
- Solar Battery Chargers: Grants for solar-powered battery chargers for electric vehicles and motorcycles.

5.2.7. The Construction and Housing Sector

For the construction and housing sector, strategic interventions are indeed necessary due to its nature of high capital expenditure and typically lower impact from smaller funding levels. The sector often involves larger firms rather than MSMEs; however, there are sustainable solutions and interventions that can be implemented, even on a smaller scale, to improve energy efficiency, reduce environmental impact, and promote sustainability.

1. Energy-Efficient Construction Practices

- Sustainable Building Materials: Funding for the use of sustainable materials such as recycled steel and reclaimed wood in construction projects.
- Passive Solar Design: Support for incorporating passive solar design into new constructions, maximizing natural heating, cooling, and lighting.

2. Renewable Energy Installations

- Solar PV Systems for Buildings: Grants for installing solar photovoltaic systems on the rooftops of commercial and residential buildings.
- Solar Water Heating: Funding for solar water heating systems to provide energy-efficient hot water supply for multi-unit dwellings or commercial buildings.

3. Efficient Use of Water Resources

- Rainwater Harvesting Systems: Support for the installation of rainwater harvesting systems in new and existing buildings for non-potable uses such as irrigation and flushing toilets.

4. Energy Performance Upgrades

- HVAC System Upgrades: Grants for the installation of high-efficiency HVAC systems that reduce energy use and improve indoor air quality.
- LED Lighting Solutions: Funding for LED lighting retrofits to lower energy consumption and extend the lifespan of lighting fixtures.

5. Sustainable Landscaping

- Green Roofs and Walls: Support for creating green roofs and walls that provide insulation, reduce the urban heat island effect, and improve air quality.
- Drought-Resistant Landscaping: Grants for xeriscaping and drought-resistant landscaping to reduce water usage for outdoor spaces of buildings.

6. Recycling of Construction Waste for New Materials

- Construction Material Recovery Facilities: Support for the development of facilities specialized in recovering and processing construction and demolition waste into new building materials, such as recycled aggregate for road base or new concrete.

7. Building-Integrated Photovoltaics (BIPV)

- BIPV: Promote the integration of photovoltaic materials into building facades, windows, and roofs. BIPV not only generates electricity but also adds architectural aesthetics to buildings. It's particularly relevant in urban areas like Sheikh Jarrah where space for traditional solar panels might be limited.

5.2.8. Summary of Green Energy Solutions and Opportunities for Each Sector

The following table summarizes the solutions that have been explored throughout this chapter, beginning with the thematic potential interventions, and summarizing each solution tailored to the highlighted sectors and their underlying enterprises.

Table 4: Summary of Green Economy Solutions for Each Identified Sector

1. THEMATIC SOLUTIONS							
I. Solar Energy	II. Water Efficiency and Rain Water Harvesting	III. Waste Management and Resource Recovery	IV. Energy Efficiency	V. Technical Support and Capacity Building	VI. Digital Transformation		
<ul style="list-style-type: none"> ➤ PV Systems ➤ Solar Powered Water Heating ➤ Solar Tracking Systems 	<ul style="list-style-type: none"> ➤ Rainwater Harvesting Systems ➤ Water-Efficient Appliances and Technologies ➤ Water Recycling and Reuse 	<ul style="list-style-type: none"> ➤ Waste Audits ➤ Prioritize Projects that fall within the core of Circular and Green Economy ➤ Composting Organic Waste ➤ Reduction of Resource Utilization such as Single-Use Plastics and Paper ➤ Sustainable Packaging 	<ul style="list-style-type: none"> ➤ Energy Audits ➤ Upgrading to Energy-Efficient Equipment ➤ Thermal Insulation ➤ Improvements ➤ Optimization of Production Processes ➤ Monitoring and Control Systems 	<ul style="list-style-type: none"> ➤ Include Technical Support in the Provided Grants ➤ Cooperation and Engagement ➤ Publicity and Marketing 	<ul style="list-style-type: none"> ➤ Cloud Based Solutions ➤ Smart Automation and Internet of Things (IoT) ➤ Data Analytics and Optimization 		
2. SECTOR AND ENTERPRISE SPECIFIC SOLUTIONS							
CATEGORY	PRIORITY SECTORS					NON-PRIORITY SECTORS	
SECTOR	MANUFACTURING	TOURISM	SERVICES	CIVIL SOCIETY	AGRICULTURE	WHOLESALE AND RETAIL TRADE	CONSTRUCTION AND HOUSING SECTOR
ENTERPRISE SPECIFIC SOLUTIONS	1.Manufacturing of Furniture and Wood <ul style="list-style-type: none"> ➤ Sustainable Sourcing of Materials ➤ Eco-Friendly Finishes and Adhesives ➤ Waste Reduction and Management ➤ Energy Efficiency in Production 	1.Acomodation (Hotels and Hostels) <ul style="list-style-type: none"> ➤ Energy Efficiency ➤ Water Conservation ➤ Sustainable Sourcing ➤ Waste Management ➤ Building and Renovation ➤ Renewable Energy Sources 	1.Office Based Intangible Services <ul style="list-style-type: none"> ➤ Digital and Cloud-Based Solutions ➤ Energy Management ➤ Sustainable Transportation 	1.NGOs <ul style="list-style-type: none"> ➤ Solar Power Adoption ➤ Efficient Infrastructure Modernization ➤ Waste Reduction and Recycling ➤ Technology for Green Operations 	1.Livestock <ul style="list-style-type: none"> ➤ Precision Livestock Farming ➤ Nutrient Management ➤ Water Resource Management ➤ Renewable Energy Integration 	1.General Wholesale and Retail Trade (incl. Motor Vehicles and Motorcycles) <ul style="list-style-type: none"> ➤ Energy-Efficient Lighting and Appliances ➤ Solar Power Installations ➤ Smart Inventory and 	1.Construction of Buildings <ul style="list-style-type: none"> ➤ Energy-Efficient Construction Practices ➤ Renewable Energy Installations ➤ Efficient Use of Water Resources ➤ Energy Performance Upgrades



	<ul style="list-style-type: none"> ➤ Certification and Marketing 			<ul style="list-style-type: none"> ➤ Water Conservation Strategies ➤ Empowering Community Green Projects ➤ Energy Management and Optimization ➤ Outreach and Engagement Enhancement ➤ Fostering Innovation and Creativity ➤ Creating Collaborative Green Spaces 	<ul style="list-style-type: none"> ➤ Efficient Use of By-Products ➤ Energy-Efficient Infrastructure Upgrades 	<ul style="list-style-type: none"> Storage Solutions 	<ul style="list-style-type: none"> ➤ Sustainable Landscaping ➤ Recycling of Construction Waste for New Materials ➤ Building-Integrated Photovoltaics (BIPV)
<p>2.Manufacturing of Apparels and Textiles</p> <ul style="list-style-type: none"> ➤ Water Efficiency ➤ Energy Efficiency ➤ Sustainable Materials ➤ Chemical Management ➤ Waste Reduction ➤ Eco-Labeling and Consumer Education ➤ Circular Economy Business Models 	<p>2.Restaurants, Cafes, and Food & Beverage Establishments</p> <ul style="list-style-type: none"> ➤ Efficient Kitchen Operations ➤ Sustainable Food Sourcing ➤ Water Conservation ➤ Waste Reduction and Management ➤ Energy Conservation ➤ Green Dining Experience ➤ Sustainable Packaging for Takeaway ➤ Green Certifications 	<p>2. Transportation and Storage</p> <ul style="list-style-type: none"> ➤ Vehicle Modernization (EVs and Charging Stations) ➤ Route Optimization ➤ Energy-Efficient Warehousing ➤ Packaging Optimization 		<p>2.Plant Production</p> <ul style="list-style-type: none"> ➤ Efficient Water Use and Irrigation Systems ➤ Renewable Energy Integration ➤ Sustainable Soil Management ➤ Integrated Pest Management (IPM) ➤ Crop Diversification and Resilience Building ➤ Market Access and Value Addition ➤ Greenhouse and Controlled Environment Agriculture ➤ Community Supported Agriculture (CSA) and Cooperatives ➤ Technology and Data for Smart Farming ➤ Hydroponics: Soilless 		<p>2.Repair of motor vehicles and motorcycles</p> <ul style="list-style-type: none"> ➤ Eco-friendly Facility Upgrades ➤ Water and Energy Conservation ➤ Waste Management Solutions ➤ Sustainable Repair Practices ➤ Advanced Diagnostics and Repair Technology ➤ Renewable Energy Tools and Machinery 	
<p>3.Manufacturing of Metals, Plastics, and Chemicals</p> <ul style="list-style-type: none"> ➤ Resource and Energy Efficiency and Recovery ➤ Process Optimization ➤ Sustainable Material Alternatives 	<p>3.Arts, Sports, and Recreational Activities</p> <ul style="list-style-type: none"> ➤ Sustainable Event Planning ➤ Energy Conservation in Facilities ➤ Water Conservation ➤ Waste Management 	<p>3.Health and Social Work</p> <ul style="list-style-type: none"> ➤ Energy Efficiency in Healthcare Facilities ➤ Water Conservation ➤ Waste Management ➤ Sustainable Building Design 					



		<ul style="list-style-type: none"> ➤ Green Spaces for Sports and Recreation 	<ul style="list-style-type: none"> ➤ Transportation for Healthcare Services 		<p>Cultivation System Aquaponics: Integrated Fish and Plant Farming</p>		
	<p>4. Other Manufacturing Industries (General incl. food and beverage)</p> <ul style="list-style-type: none"> ➤ Resource-Efficient Manufacturing Processes ➤ Sustainable Material Use ➤ Energy Management Systems ➤ Water Conservation in Industrial Processes ➤ Waste Minimization and Recycling ➤ Eco-Design and Product Lifecycle Management ➤ Pollution Control Measures ➤ Upgrading Traditional Industries 		<p>4. Education</p> <ul style="list-style-type: none"> ➤ Installation of Solar Panels on Educational Institutions ➤ Energy Efficiency Upgrades ➤ Student Engagement and Innovation ➤ Energy Efficient Transportation for Schools ➤ Improving School Infrastructure 				



6. Findings and Recommendations

After examining the priority sectors and their key enterprises as discussed earlier in this report, and acknowledging the distinct challenges to green energy and economic adaptation in East Jerusalem, this chapter aims to consolidate the presented findings and focus on the relevancy and proportionality needed vis-à-vis the Green Energy and Sustainability Granting Facility.

- **Greenwashing:** One of the challenges facing the Granting Facility is Greenwashing. Where it poses a significant concern for funding initiatives such as the Granting Facility, wherein applicants may propose projects that seem to align with the facility's goals superficially but are, in essence, greenwashed. These proposals are often attractively packaged but lack substantive environmental benefits, particularly concerning energy efficiency and the acquisition of machinery and equipment that are ostensibly efficient. Where such machinery are not perse "environmentally harmful", but are by default efficient and energy saving. It is crucial for the facility to implement rigorous vetting processes to ensure the authenticity and actual green credentials of the proposed solutions.
- **Maximizing Impact:** Another challenge is maximizing the value of the financing provided to MSMEs. Where certain interventions hold higher green energy potential than others. And where some barely meet the threshold to qualify. Certain aspects and solutions such as equipment upgrade could be highly beneficial if proven that they are replacing old and energy consuming equipment, while if for a new establishment, the impact is seriously minimized as previously mentioned most new equipment and machinery are energy efficient by default, and the range of efficiency between new equipment does not vary by much compared to older and depreciated ones.
- **Repetitive Applications:** Through reviewing the relevant documents of previous beneficiaries and current applicants, it is clear that there is a pattern of repeating applications for certain solutions, such as Electric Vehicles for Taxis and driving schools. While EVs for instance are one of the pioneering technologies within the heart of the green economy, it's impact is subjective to factors that include mainly its battery type and origin as well as the source of electricity in the local grid. Where such vehicles begin with a high upfront carbon footprint, and its emission savings during its lifetime are conditional to the source of electricity in the grid. Such applications have been reoccurring in the Granting Facility's history, where it can be speculated that other solutions such as solar PV systems, could have higher impact (e.g., 70,000 Euros spent on Solar PV have much higher green energy impact than the same amount spent to purchase one EV).
- **Lack of Applications:** While the Granting Facility operates on a rolling-basis, the numbers of received application do not result in a competitive atmosphere, and the Grant is therefore obliged to accept applicants on a continuous basis. Despite the dire need for financial

support in East Jerusalem's MSMEs sphere, this issue highlights challenges faced in awareness.

- Knowledge and Capacity Among Beneficiaries: While the facility provides substantial financial aid to East Jerusalem's MSMEs, other stated solutions that often stem from beneficiaries capacities and intrinsic institutional knowledge are missing. Operational and managerial procedures stated in the previous section mostly do not carry additional cost, and with the support provided through the Granting Facility, the sustainability impact could be further enhanced.

Therefore, the following present solutions to tackle the aforementioned challenges specific to the Granting Facility;

I. Approved & Pre-Selected Equipment

The Singapore experience presents valuable input in this regard as outlined under section 3.6, the Energy Efficiency Grant (EEG) provides a list of pre-approved equipment that include for instance; LED lighting, Air conditioners, cooking hobs, Refrigerators, Water heaters, and Clothes dryers. The approved list could include energy consumption thresholds that the selected equipment should not surpass. These could include ENERGY-STAR approved ratings, and further technical criteria to ensure that the equipment purchased in deed possess the most suitable and highest efficiency attainable.

II. Technical Non-Financial Support

While the Granting Facility provides additional support in terms of marketing and Energy Efficiency consultancy services, these are either a "top-up" scheme for marketing, or separate applications for energy efficiency. While this strategy is still effective, a consultation conducted with UNIDO revealed that non-financial measures could lead to significant savings by themselves, cases presented where for the manufacturing section where changing the location of storage to avoid loses, setting up temperature patterns, and enhancing operational procedures yielded savings of a couple of thousands to a hundred thousand Euros per each manufacturing facility.

Therefore, it is suggested that energy audits to be an integral part of the due-diligence process, tailored to each applicant upon shortlisting, and to be integrated within the financial support package. In short, Bundle grant funding with expert support and training for MSMEs to implement green practices effectively.

III. Sustainability Declarations

As part of the due diligence process, and to avoid incurring costs of energy, water, waste, or operational audits. It is suggested to include a "Sustainability Declaration" to be signed by the

applicants as part of their application process. Where if deemed otherwise, such as cases of Greenwashing, applicants have to bear the cost of the due diligence conducted.

Further measures to be explored include Penalties for Misrepresentation: Where the consequences for organizations that misrepresent their sustainability practices will be clearly communicated, including potential disqualification from current and future funding.

IV. Tiered Grants

To avoid issues of repeating applications, where the case of EVs for driving schools or taxis has been mentioned above. A 3-tier granting scheme is suggested;

- I. Tier 3: smaller grants for basic green upgrades (e.g., LED lighting, water saving fixtures) and for the purchase of EVs.
- II. Tier 2: Purchase of new equipment for new projects, financing operational aspects such as the replacement of raw material with sustainable ones.
- III. Tier 1: larger grants for transformative projects or ones that fall within the heart of Green and Circular Economies (e.g., solar panel installation, recycling projects, sustainable production processes, replacing old energy and resource consuming equipment with modern and more efficient ones).

V. Stakeholder Engagement

Input received during consultation with the stakeholders listed in Annex III has been invaluable to the progress of this report. Further engagement activities will strengthen the Facility's presence as a key influencer in the Green Economy development of East Jerusalem as well as creating awareness regarding the facility among MSMEs. Collaborative efforts could be achieved, lessons learnt could be shared both to support other initiatives, enhance the Facility's interventions, and attract more applicants.

For instance, services provided by JDECO in terms of energy audit and solar energy installation assessments could be utilized under the project. Hence, it is beneficial to establish partnerships with local NGOs, institutions, and universities: Leverage their expertise to provide technical assistance, conduct training programs, and connect MSMEs with relevant resources.

Further engagement should include the entities engaged with in Annex III as well as the UNDP's Go-Solar project, East Jerusalem Tourism Development Programme, "Green Growth Palestine" project, and Mostadama.

VI. R&D and Digital Economy

While financial grants to MSMEs is a highly impactful scheme to enhance East Jerusalem's Green transition, supporting R&D Efforts is also critical as it targets green entrepreneurs, who are mostly youth and women to develop new projects and technologies that are focused on Green Economy transition. As showcased in the Granting Facility's action plan, Eco-Hackathons are a significant tool. Yet further support is needed. Such projects could be listed under "tier-3" as defined above, where solutions such as 3D printing to replace conventional plastic manufacturing, recycling projects, composting, CNC, or cloud-services and PaaS to transition into paper-less operations could be supported with a relatively smaller grant amount for R&D.

VII. Green Certification Programs and Green Innovation Challenges

Similar to the idea of Eco-Hackathons, but on a level extending to technical non-financial support, the idea here is to firstly assist MSMEs as part of their marketing grants to obtain Green Certificates, whether they be for buildings (e.g., LEED Certificates), or Sustainability ratings on www.Booking.com for instance in the cases of hotels, or ISO 14001 for manufacturing facilities. Additional incentives include annual review and rewards for existing beneficiaries, sharing their energy and resource consumption pre-and post-conducting the changes supported by the Granting Facility, this enhances their intrinsic monitoring schemes.

VIII. Sectoral and Thematic interventions Prioritization

Prioritize sectors: Focus on sectors with immediate impact, like water management, waste reduction, and renewable energy. A sample prioritization table can be done as follows and shall be tailored to the scope of interventions presented to the Granting Facility;

Table 5: Thematic Categorization of Interventions

Solution Category	Impact & Timeframe	Financial Cost	Scalability	Ease of Implementation	Overall Priority Score
Photovoltaic (PV) Solar Energy Installations	High / Long-term	High	High	Moderate	9
Training Programs and Workshops	High / Short-term	Low	High	High	9
Smart Automation and IoT	High / Short-term	Medium	High	Moderate	9
Smart Irrigation Systems	High / Short-term	Medium	High	Moderate	9
Data Analytics and Optimization	High / Short-term	Medium	High	High	9
LED Lighting Retrofit	High / Short-term	Low	High	High	9
Optimization of Production Processes	High / Short-term	Medium	High	High	9
Energy and Water Audits	High / Short-term	Medium	High	High	9
Reduction of Resource Utilization	Low / Short-term	Low	High	High	9



Water Recycling Systems	High / Mid-term	Medium	High	Moderate	9
Waste Management and Recycling	High / Long-term	Medium	High	Moderate	9
Rainwater Harvesting	Medium / Short-term	Low	High	High	9
Modernization of Agricultural Equipment and Smart Agriculture systems	Medium / Long-term	Medium	High	High	9
Energy-Efficient Machinery	High / Mid-term	High	Medium	Moderate	8
Solar Powered Water Heating	Medium / Mid-term	Medium	Medium	High	8
Technical Support Services	High / Mid-term	Medium	High	High	8
Sustainable Material Use	High / Long-term	Medium	High	Moderate	8
Sustainable Packaging	High / Long-term	Medium	High	Moderate	8
Smart Thermostats and HVAC Upgrades	Medium / Short-term	Medium	Medium	Moderate	8
Water-Efficient Appliances and Technologies	High / Mid-term	Medium	High	Moderate	8
Monitoring and Control Systems	High / Mid-term	High	High	Moderate	8
Waste Audits	Medium / Short-term	Low	Medium	High	8
Composting Organic Waste	Medium / Short-term	Low	Medium	High	8
Solar Tracking Systems	Medium / Mid-term	Medium	Medium	Moderate	7
Green Building Practices	High / Long-term	High	Medium	Low	7
Water Recycling and Reuse	High / Long-term	High	High	Low	7
Energy-Efficient Machinery	High / Mid-term	High	Medium	Moderate	7
Green Certification and Eco-Labeling	Medium / Long-term	Medium	Medium	Moderate	7
Precision Automation in Manufacturing	High / Mid-term	High	Medium	Moderate	7
Upgrading to Energy-Efficient Equipment	High / Mid-term	High	Medium	Moderate	7
Circular Economy Business Models	High / Long-term	High	Medium	Moderate	7
Green Building Practices	High / Long-term	High	Medium	Low	7
Sustainable Landscaping	High / Long-term	High	Medium	Moderate	7
Thermal Insulation Improvements	Medium / Long-term	High	Medium	Low	6
Digital Transformation Strategies	High / Long-term	High	High	Low	6
Electric Vehicle Incentives	Medium / Long-term	High	Medium	Low	6

IX. Selection Criteria

Setting up a rigid and effective selection criteria could be the most important aspect of the Granting Facility's operations; such a criteria is the answer to the issues outlined in the beginning of this chapter.

To create a tailored selection process and criteria for green and sustainability projects, we can draw inspiration from the "Three Horizons" model. This framework is particularly beneficial in categorizing projects based on their current alignment with sustainability, their transitional nature, and their visionary aspects of a sustainable future.

1. Alignment with Sustainable Horizons

- Horizon 1 (H1): Current operational enhancement projects.
- Horizon 2 (H2): Transitional projects with innovative strategies.
- Horizon 3 (H3): Visionary projects with potential revolutionary impacts.

2. Weighing and Categorization

Categorize the solutions based on the prioritization table as provided in table 5 above, this should add to the weight of the application.

3. Equipment Efficiency and Selection

- Applicants must submit a comparison of at least three alternatives, demonstrating the energy efficiency of their chosen equipment over others.
- Equipment must meet or exceed ENERGY STAR or equivalent standards for equipment replacement, Tier 1 panels for solar systems and so on.

Examples include;

Solar Energy	Tier 1 Panels
Equipment and appliances Category	ENERGY STAR Benchmark
HVAC Systems	SEER Rating ≥ 15
Lighting	Lumens/Watt ≥ 70

4. Verification and Documentation

- Applicants must submit their historical energy, water, and resource consumptions as applicable to their solution for existing projects.
- Provide specifications of existing equipment that are intended to be replaced

5. Calculation of CO2 Eq. Savings from the Adoption of the presented solution

Such calculations can be rough-estimates to assist in determining the overall contribution of the application. At a later stage once shortlisted, this can be further explored in the due diligence process. And if selected, the calculations will be verified by independent experts where such numbers will set the thresholds for continuous monitoring of beneficiaries' projects.

Examples of tools to assist in the preliminary calculations;

A. Electric Vehicles (EVs):

- ChooseEV Carbon Reduction Calculator: This tool can help calculate the potential carbon savings by switching from a gas car to an EV, based on the number of miles driven annually.

[Choose EV Link](#)

- NREL's Electricity Sources and Emissions Tool: The National Renewable Energy Laboratory offers a refined tool for measuring EV and PHEV emissions at the state and national level, making it easier to get precise emission measurements. This tool can be used with choosing Indiana as the main state (coal 55%, natural gas 32%), which shares a similar energy generation scheme with Israel (coal 64%, natural gas 33%). Where it shows that an all-electric EV produced around 5000 pounds of CO₂ eq. per year, compared to a full gasoline vehicle with 12,500 pounds of CO₂ eq. per year.

[NREL EV Link](#)

B. Solar Panels:

- Symtech Solar Green Savings Calculator: This calculator evaluates the CO₂ savings, equivalent to the number of cars taken off the road, trees grown, and homes powered by using solar energy systems.

[Symtech Calculator Link](#)

C. Replacement of Equipment:

- ENERGY STAR® Portfolio Manager: This tool allows businesses to track and manage the energy and water consumption of their buildings and benchmark against similar properties.
- Greenhouse Gas Equivalencies Calculator: Provided by the U.S. Environmental Protection Agency, this tool can convert reductions in energy consumption from equipment upgrades into avoided greenhouse gas emissions.

[EPA Calculator Link](#)

6. Scoring Criteria

A scoring system will be used to evaluate each criterion, with projects needing to meet minimum thresholds to qualify for funding. This approach ensures a robust, data-driven selection process that aligns with the Facility's objectives for sustainable development.

A simple template to be adopted and built upon can be as follows;

Table 6: Sample Selection Template

Criterion	Description	Score (1-3)	Applicant's Evidence	Notes
Horizon Alignment				
H1: Enhancement	Projects that enhance current operations in line with sustainable practices.	1-3		
H2: Transition	Projects that transition from traditional to innovative, sustainable strategies.	1-3		
H3: Visionary	Forward-thinking projects with potential for significant sustainable impact.	1-3		
Equipment Efficiency and Selection				
Comparison of Alternatives	Submission of at least three alternatives showing why the choice is the most energy-efficient.	1-3		Based on comparative efficiency.
Compliance with Standards	Equipment must meet or exceed ENERGY STAR or equivalent standards.	1-3		Higher scores for higher standards.
Verification and Documentation				
Historical Consumption	Submission of historical energy, water, and resource consumption data.	1-3		Based on completeness and relevance.
Specifications of Equipment	Provide specifications of existing equipment that are intended to be replaced.	1-3		More points for detailed specifications.
CO2 Eq. Savings Calculation				
Electric Vehicles (EVs)	Use of tools like ChooseEV or NREL to calculate potential CO2 savings.	1-3		Accuracy of calculations considered.
Solar Panels	Utilization of calculators such as Symtech to estimate CO2 savings from solar installations.	1-3		Based on system size and location.
Equipment Replacement	Use of ENERGY STAR® Portfolio Manager or EPA's calculator to assess savings.	1-3		Comprehensive data leads to higher scores.
Additional Considerations				
Innovation	The project introduces new, innovative approaches to sustainability.	1-3		Innovation that can be scaled or replicated scores higher.
Community Impact	The project's positive impact on the local community in sustainable development.	1-3		Evidence of community engagement and benefits.
Scalability	The project's potential for scaling up and its broader environmental impact.	1-3		Scalable projects score higher.



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Annex I: Number of Economic Enterprises in East Jerusalem By Locality

Number of Operating Establishments and Employed Persons in the Private Sector, Non-Governmental Organization Sector and Government Companies in Palestine by Locality, 2017				
Locality	No Of Employed Persons			No. Of Operating Establishments
	Females	Males	Both Sexes	
Rafat	89	363	452	61
Mikhmas	2	31	33	21
Qalandiya Camp	75	250	325	202
Qalandiya	6	53	59	14
Beit Duqqu	34	46	80	30
Jaba'	14	55	69	37
Al Judeira	23	155	178	69
Ar Ram & Dahiyat al Bareed	648	3,029	3,677	1,059
Beit 'Anan	46	172	218	97
Al Jib	74	192	266	139
Bir Nabala	148	647	795	238
Beit Ijza	26	31	57	9
Al Qubeiba	78	292	370	159
Kharayib Umm al Lahim	4	5	9	5
Biddu	200	569	769	286
An Nabi Samwil	0	1	1	1
Hizma	51	419	470	239
Beit Hanina al Balad	1	11	12	6
Qatanna	57	112	169	65
Beit Surik	35	75	110	58
Beit Iksa	10	35	45	29
A'nata	304	1,423	1,727	690
Az Za'ayyem	13	254	267	84
Al 'Eizariya	604	2,438	3,042	1,086
Abu Dis	607	1,471	2,078	398
A'rab al Jahalin (Salamat)	5	29	34	13
As Sawahira ash Sharqiya	44	202	246	111
Ash Sheikh Sa'd	11	35	46	32
Jerusalem (J2)	3,209	12,395	15,604	5,238
Jerusalem (J1)	-	-	19,182	4,466
Jerusalem Governorate	-	-	34,786	9,704



Annex II: Number of Economic Enterprises In East Jerusalem By Sector

Economic Activity	Total
Mining and quarrying	7
Other mining and quarrying	7
Manufacturing	1,218
Manufacture of food products	238
Manufacture of beverages	1
Manufacture of tobacco products	1
Manufacture of textiles	9
Manufacture of wearing apparel	82
Manufacture of leather and related products	6
Manufacture of wood and products of wood and cork, except furniture; Manufacture of articles of straw and plaiting materials	54
Manufacture of paper and paper products	8
Printing and reproduction of recorded media	64
Manufacture of coke and refined petroleum products	0
Manufacture of chemicals and chemical products	10
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1
Manufacture of rubber and plastics products	3
Manufacture of other non-metallic mineral products	102
Manufacture of basic metals	7
Manufacture of fabricated metal products, except machinery and equipment	279
Manufacture of computer, electronic and optical products	0
Manufacture of electrical equipment	0
Manufacture of machinery and equipment n.e.c.	1
Manufacture of motor vehicles, trailers and semi-trailers	0
Manufacture of other transport equipment	0
Manufacture of furniture	334
Other manufacturing	3
Repair and installation of machinery and equipment	15
Electricity, gas, steam and air conditioning supply	7
Electricity, gas, steam and air conditioning supply	7
Water supply; sewerage, waste management and remediation activities	9
Water collection, treatment and supply	5
Sewerage	0
Waste collection, treatment and disposal activities; materials recovery	4
Remediation activities and other waste management services	0
Construction	34
Construction of buildings	18
Civil engineering	0
Specialized construction activities	16
Wholesale and retail trade; repair of motor vehicles and motorcycles	5,286

Wholesale and retail trade and repair of motor vehicles and motorcycles	686
Wholesale trade, except of motor vehicles and motorcycles	173
Retail trade, except of motor vehicles and motorcycles	4,427
Transportation and storage	162
Land transport and transport via pipelines	60
Water transport	0
Air transport	0
Warehousing and support activities for transportation	100
Postal and courier activities	2
Accommodation and food service activities	665
Accommodation	19
Food and beverage service activities	646
Information and communication	49
Publishing activities	3
Motion picture, video and television programme production, sound recording and music publishing activities	0
Programming and broadcasting activities	1
Telecommunications	43
Computer programming, consultancy and related activities	1
Information service activities	1
Financial and insurance activities	73
Financial service activities, except insurance and pension funding	18
Insurance, reinsurance and pension funding, except compulsory social security	24
Activities auxiliary to financial service and insurance activities	31
Real estate activities	20
Real estate activities	20
Professional, scientific and technical activities	286
Legal and accounting activities	169
Activities of head offices; management consultancy activities	10
Architectural and engineering activities; technical testing and analysis	42
Scientific research and development	0
Advertising and market research	12
Other professional, scientific and technical activities	49
Veterinary activities	4
Administrative and support service activities	125
Rental and leasing activities	41
Employment activities	2
Travel agency, tour operator, reservation service and related activities	46
Security and investigation activities	0
Services to buildings and landscape activities	0
Office administrative, office support and other business support activities	36
Public administration and defence; compulsory social security	9
Public administration and defence; compulsory social security	9
Education	274
Education	274
Human health and social work activities	376
Human health activities	305
Residential care activities	14
Social work activities without accommodation	57



Arts, entertainment and recreation	178
Creative, arts and entertainment activities	6
Libraries, archives, museums and other cultural activities	2
Sports activities and amusement and recreation activities	170
Other service activities	827
Activities of membership organizations	74
Repair of computers and personal and household goods	125
Other personal service activities	628
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	1
Activities of households as employers of domestic personnel	1
Activities of extraterritorial organizations and bodies	4
Activities of extraterritorial organizations and bodies	4
Not stated	18
Total	9,628



Annex III: Stakeholder Engagement Log

Stakeholder	Focal Point	Date
Jerusalem District Electricity Distribution Company	Eng. Samah Desht	30 November 2023
Palestinian Central Bureau of Statistics	Mr. Maen Salhab	13 December 2023
Arab Chamber of Commerce & Industry - Jerusalem	Ms. Majdoleen Al Zibn	20 December 2023
Palestinian Housing Council	Ms. Marah Yaseen	21 December 2023
UNIDO	Dr. Said Dweikat	23 December 2023