

# The Just Transition in Action!



## Danish Climate, Energy and Utilities Committee – Visit

7 March 2025

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Utilities Committee – Visit

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# Programme

Time	Item	Responsible
09h00 – 09h15	Arrival, Welcoming and introduction	Selwyn Willoughby, Executive: Integrated Ecosystem Development
09h15 – 09h45	Overview by the Danish Climate, Energy and Utilities Committee	Danish Committee
	Presentation: ASEZ – the pioneering place where greentech thrives	Selwyn Willoughby
09h45 – 10h00	Q&A	All
10h00 – 10h15	Refreshments	All
10h15 – 10h30	Travel to host company	All
10h30 – 11h30	Site visit to Atlantis Foundries – including discussion on CBAM	Mr Pieter du Plessis, CEO: Atlantis Foundries
11h45	Departure	All



“If we are going to have a sustainable future  
we need sustainable manufacturing”



where green tech grows



## **Vision:**

The pioneering place where Africa's green economy thrives



## **Mission:**

Supporting and anchoring Greentech businesses to thrive and contribute to the transformation of South Africa for Africa's inclusive green economy and investment growth



What is  
greentech?  
the guiding principles of  
sustainable  
manufacturing



# What is Greentech?

Lower Carbon



Resource efficient



Socially inclusive

- Mitigates and/or reverses impact of human activity on environment.
- Includes renewable energy, energy storage, energy efficiency, water efficiency and management, greener packaging, recycling and green chemicals.
- Resource-efficient producer employs processes, products and services to increase the resource-efficiency of production and to reduce pollution and minimise negative impacts on humans and the environment.



# Nine categories of green technologies

-  **Renewable energy generation:** renewable energy generation
-  **Energy storage:** batteries, thermal storage, hybrid systems
-  **Resource efficiency:** smart grids, green buildings, lighting, HVAC, smart & efficient appliances, collaborative consumption, efficient processes
-  **Transportation:** e-mobility and electric vehicles, traffic management, fuelling charging infrastructure, rail & water transport innovation
-  **Water and wastewater:** conservation, purification, treatment, production
-  **Recycling and waste:** recycling, waste treatment and recovery
-  **Advanced materials and packaging:** Nano, biomaterials, green chemicals, advanced packaging
-  **Air and environment:** carbon sequestration, carbon trading/offsets, emissions control
-  **Agriculture:** land management, green pesticides, aquaculture, hydroponics, aeroponic



# Pioneering place where Africa's green economy thrives



## 1) Target greentech manufacturing for jobs

The ASEZ is a catalyst for economic growth and jobs in the green technology sector. We target and attract pioneering green technology manufacturing enterprises that contribute to a low-carbon, resource efficient and inclusive economy

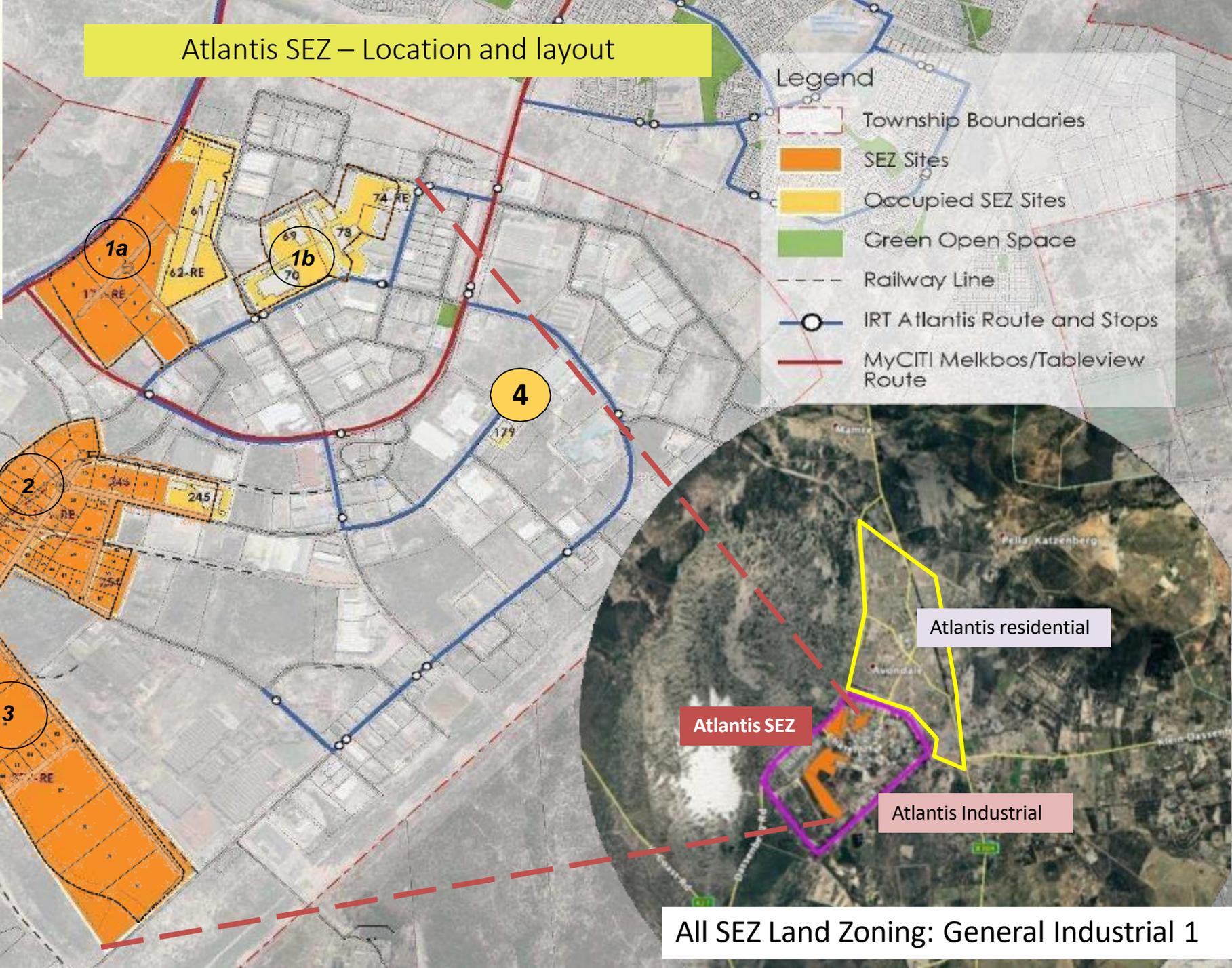
## 2) Promote green and inclusive manufacturing

We actively support innovation and pioneering approaches to sustainable manufacturing in the zone. We see the zone as a living lab to support approaches to South Africa's just transition

## 3) Good governance and partnerships as key enablers

We are building a world-class green technology hub underpinned by solid governance and enabled through collaborative partnerships with tenants, community, academia and broader ecosystem stakeholders.

# Atlantis SEZ – Location and layout

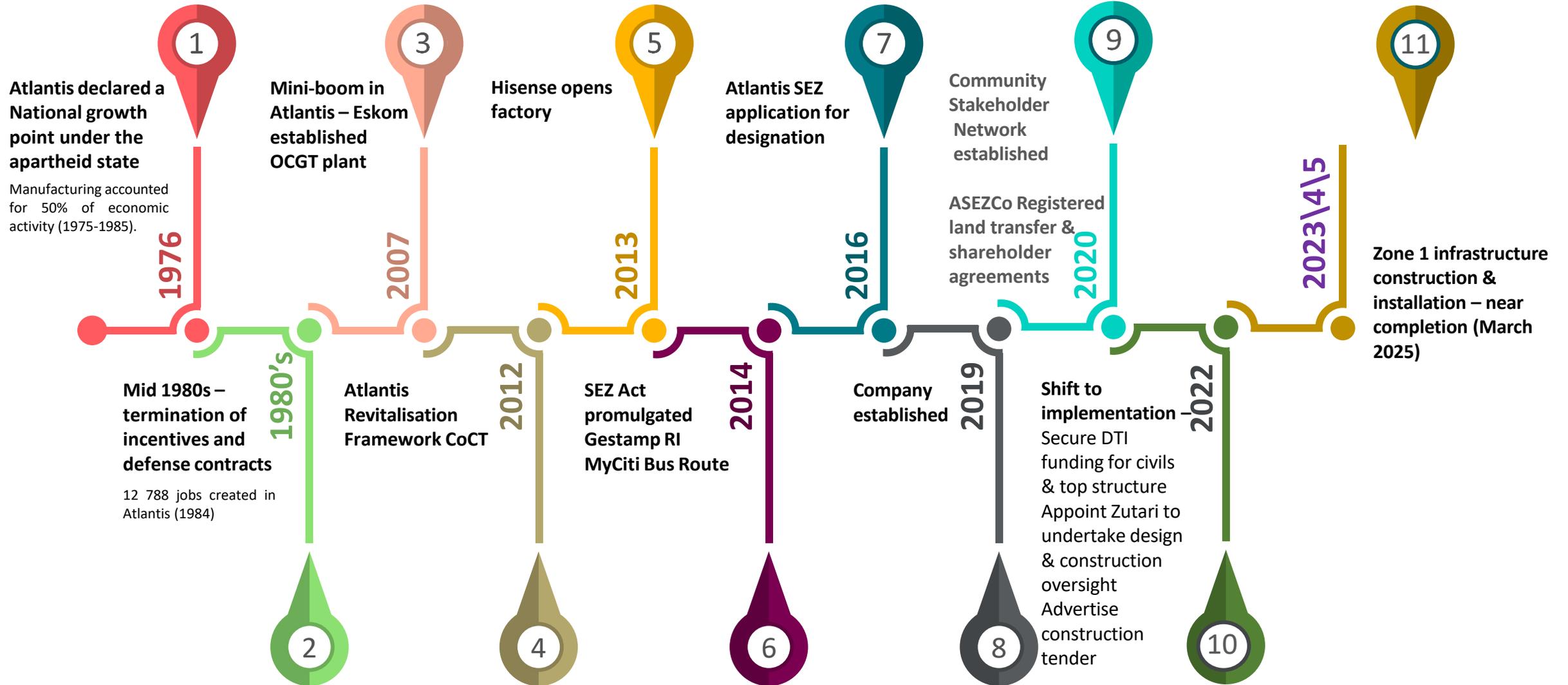


# About Atlantis





# Timeline for Atlantis & ASEZ



# About Atlantis

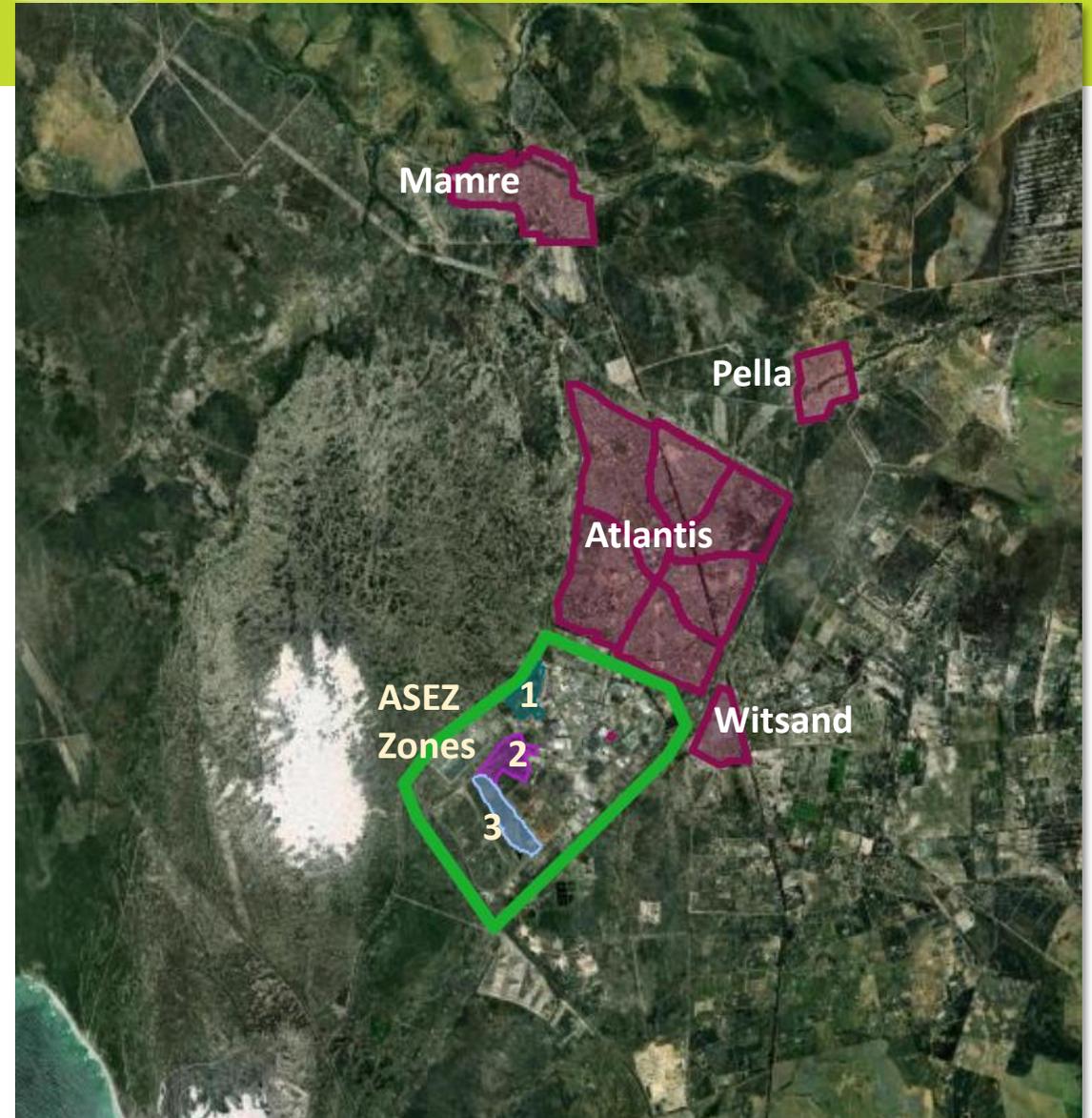
Atlantis population ~ 90 000

One of the fastest growing areas in Cape Town

Unemployment rate ~ 33%

Post-school education – 3.1%

Household income – 50% earns R3200 or less



# Atlantis Industrial

3.33% of Industrial Floor Space in Cape Town

54.3% of Floor Space in Atlantis is used for Manufacturing

*20.7% of Floor Space in Atlantis is Vacant*

*Highest manufacturing output in the City*



Cape Town Industrial Floor Space by Location

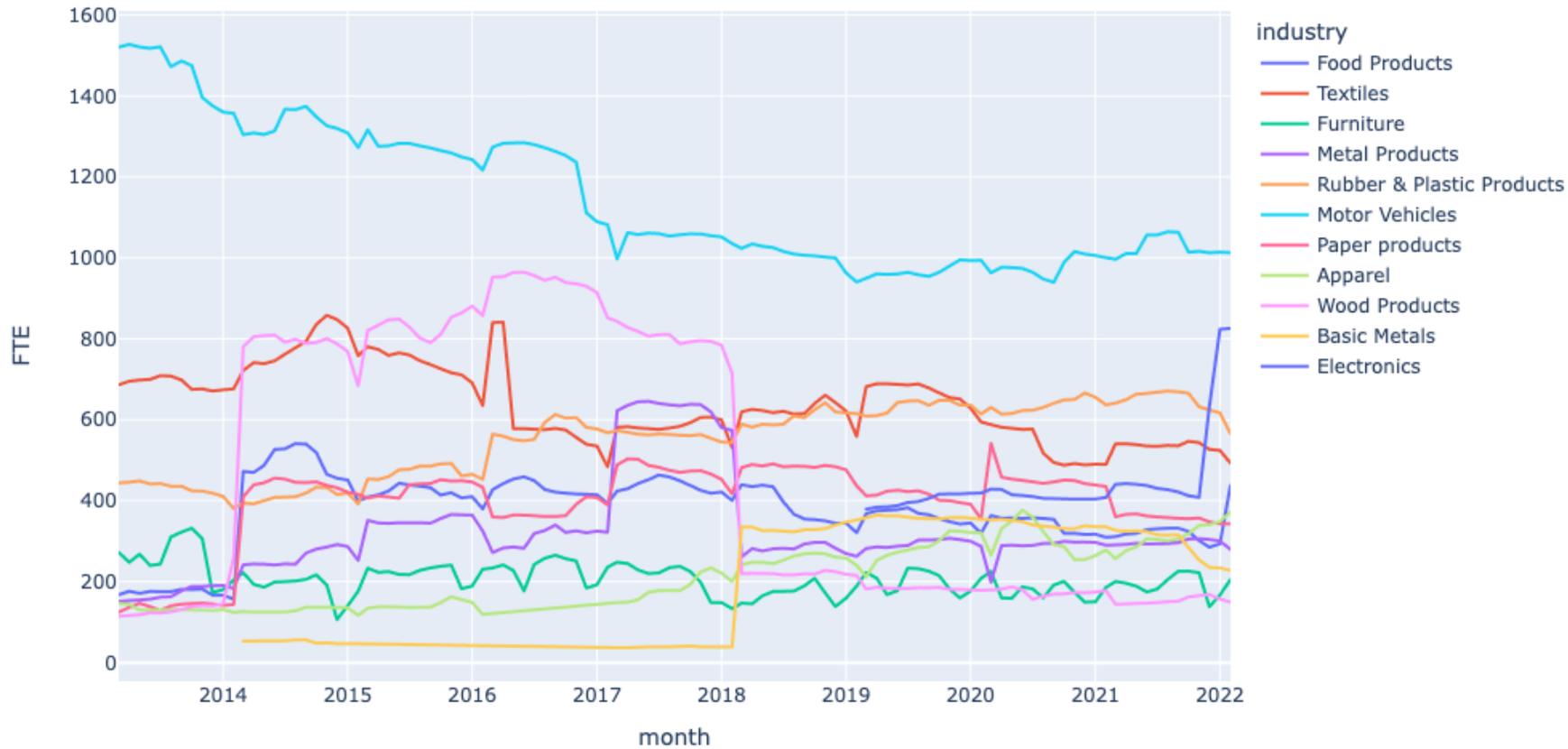


# Top 10 manufacturing employers in Atlantis

FTE	Industry
893.2795	Motor Vehicles
644.9973	Plastic Products
510.2658	Consumer Electronics
312.6192	Wearing Apparel
305.3644	Textiles NEC
283.2164	Corrugated Paper and Cardboard
276.663	Basic iron and steel industries; except steel pipe and tube mills
228.0164	Knitted and crocheted fabrics
194.1644	Furniture
147.937	Metal containers, e.g. cans and tins

# Manufacturing Industry Trends

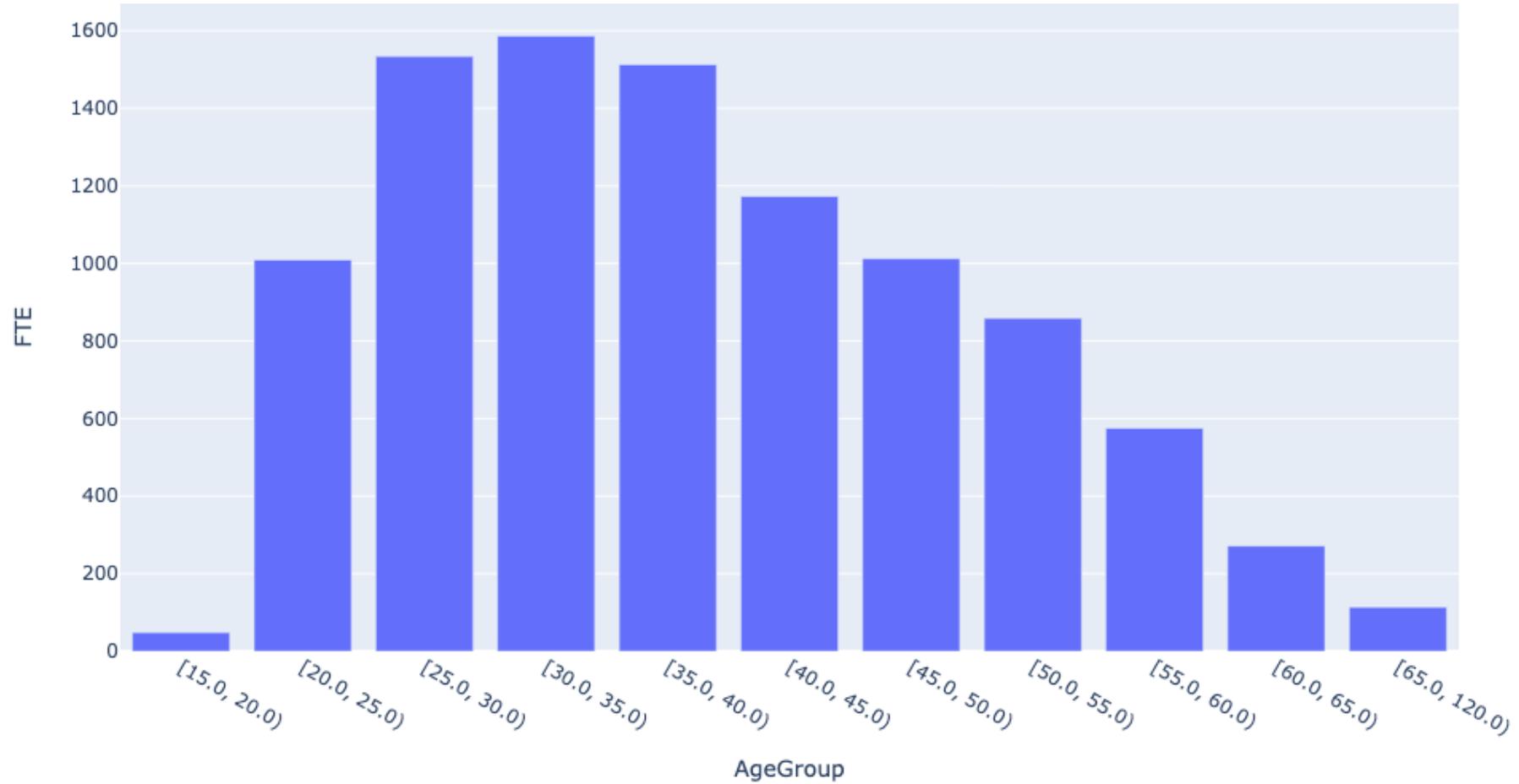
Significant Manufacturing Sector Contributors Atlantis 2014 - 2022



*Motor Vehicles dominant but declining, Electronics are an emerging employer.*

# Employment Largely Young

Formally Employed by Age Atlantis 2022



What is  
greentech?  
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manufacturing



# Pioneering place where Africa's green economy thrives



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# Current tenants of the ASEZ

## Swartland

Multifaceted building supplies and building insulation (reduce energy requirements) manufacturer.



## Everflo

An original equipment manufacturer specialising in industrial refrigeration addressing global concerns in food, water, and energy security – including off grid refrigeration and water purification for remote hospitals



## Ahlesa

Manufacturing company that supports green initiatives, supporting energy efficiencies of mechanical production equipment, improve air quality, increase water conservation, contribute to a higher concentration of waste avoidance, increase recycling streams and invest in environmentally friendly practices.



## Mint & Honey

Agro-Processing – high protein food supplement for school feeding schemes.



## Kaytech

Kaytech has been providing the Southern African Civil Engineering industry with geotextiles and geosynthetic solutions since 1971 – the product is manufactured using recycled plastic.



## Gestamp renewables (GRI)

Manufacturing of steel towers and flanges for the wind sector.



## Modulêr

Modulêr Electrical Assemblies offers a complete range of type tested modular assemblies as well as other assemblies and containers for large solar, wind and other electrical installations.



## Iconic Gases

A rapidly expanding company supplying a comprehensive portfolio of Industrial and Speciality Gasses and Equipment for projects in the industrial space.



# Atlantis SEZ only: Investment and impact

(2021 to January 2025 through investment declarations)



8  
Investors

R1b  
Investment  
(Buildings and machinery)

R4b  
CAPEX and OPEX investment  
over 5 year

952  
5-year job number projection

1.2

# Targeting new greentech investors



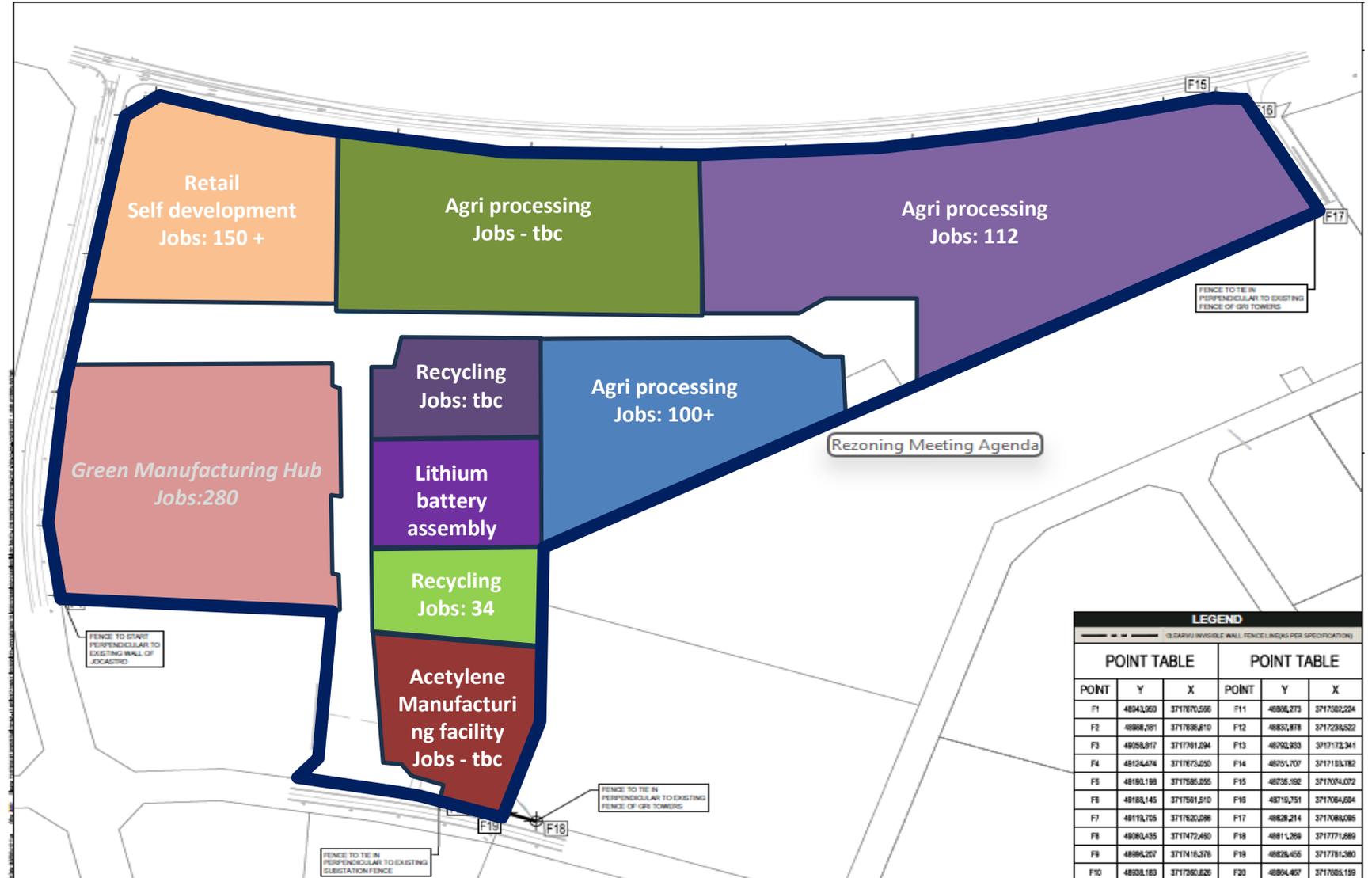
# Secured Site Reservations/Leases Agreements

33

A-Pipeline investors

8

Site Reservation Agreements



2.

A living lab for  
pioneering green  
tech



2.1

Inclusion as key  
focus and impact  
multiplier



# Integrated Ecosystem Development – impact multipliers

## What we do

### Skills Development

The main objective of our skills development work is to equip the people of Atlantis with skills to improve their employment prospects and/or support self-employment, both within the proposed Atlantis SEZ and beyond.

Supporting work-based experience by placing learners in industry related settings. Supporting critical skills qualification such as welding.

### Enterprise Development

The main objective of the enterprise development program is to support the growth of SMMEs/EMEs in Atlantis, enabling their integration into the supply chains of larger companies operating in Atlantis and investing in the SEZ.

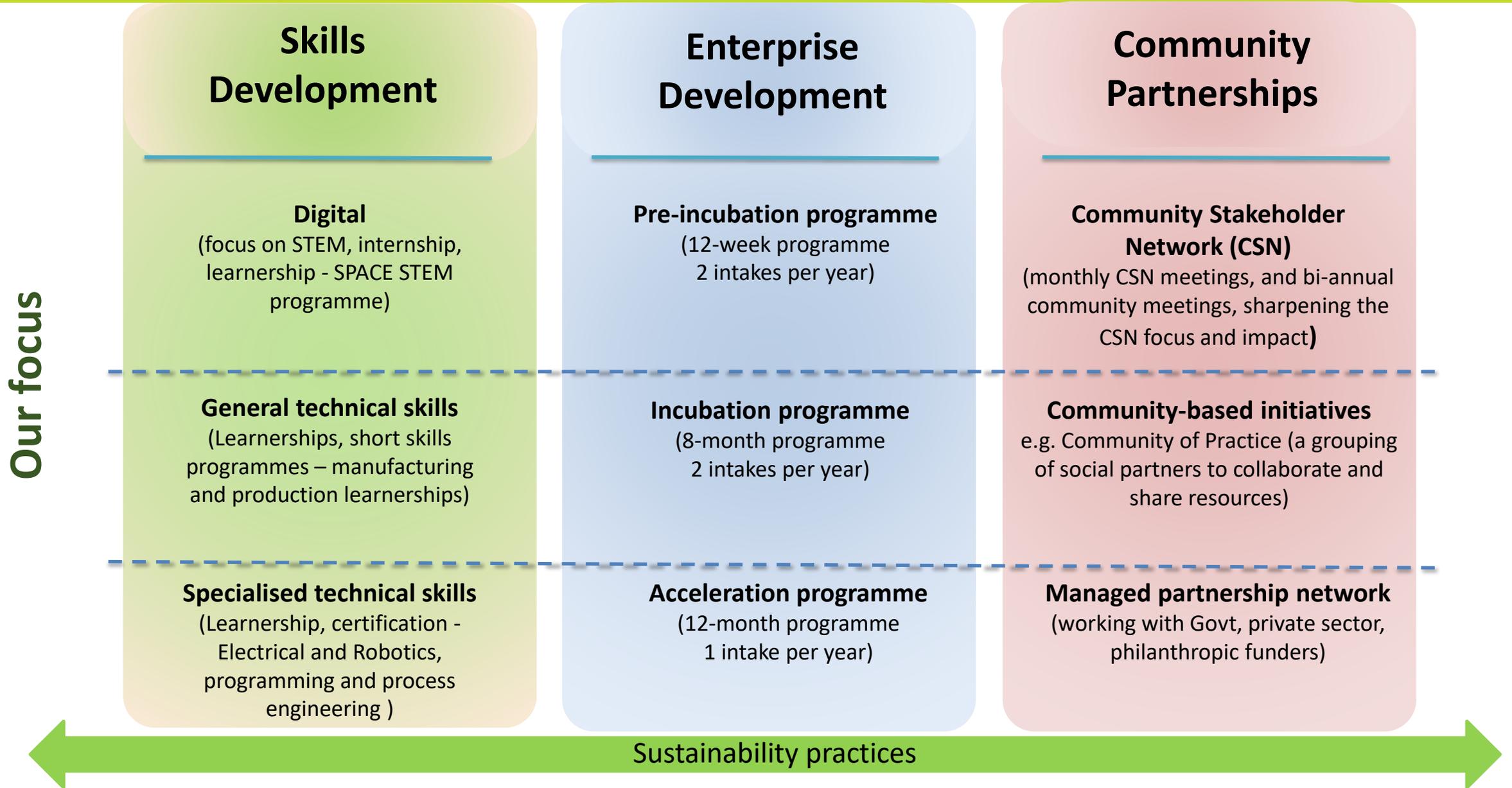
Supporting the small enterprises through supplier compliance support initiatives, training and mentoring. Exploring innovative financing mechanisms for EME's.

### Community Partnerships

The ASEZ succeeds with community buy-in and inclusion, integrated into overall plans and benefits. Its key objectives are to inform, educate, and build strong relationships with diverse stakeholders.

We established the Community Stakeholder Network—a platform to foster engagement and collaboration between the ASEZ and the local community.

# Integrated Ecosystem Development – impact multipliers



# Integrated Ecosystem Development – impact multipliers

Examples of past initiatives  
and impact...

## Skills Development



14 participants successfully completed the welding Artisan Recognition of Prior Learning (ARPL) programme

31 initiatives

## Enterprise Development



50 SMME's over an 8-month period with compliance

35 initiatives

## Community Partnerships



ASEZCo collaborates with community forums to develop effective and sustainable partnerships.

22 initiatives

where green grows



# Community Integration

## Community Stakeholder Network

The ASEZCo works closely with the CSN to ensure we maintain a strategic partnership with the community.

We have regular monthly meetings and the CSN provides feedback to the ASEZ Board about their activities.



Regular monthly meetings



Atlantis Special Economic Zone Community Stakeholder Network

# Community Integration

## Community Forum Meetings

Continue to meet with the community forums to develop effective & sustainable partnerships.

These engagements serve an important purpose as it allows the ASEZCo to gather valuable feedback from community members, fostering better understanding of the needs and aspirations of the local community.



2 Community Forum meetings

In partnership



Atlantis Special Economic Zone Community Stakeholder Network

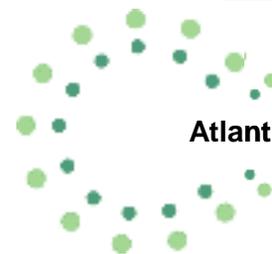
# Community Integration

## Community capacity building sessions

Capacity building is a critical tool for ensuring that Atlantis' development is inclusive, sustainable, and community-driven, allowing ASEZ to foster long-term prosperity for the region. Giving the community skills in leadership, technical knowledge, and caring for their own community helps them handle economic changes and take part in important decisions making processes. This ensures that Atlantis can grow in a strong, sustainable way that keeps up with local developments.

The CSN has played a pivotal role in the successful execution of the civil works project within the ASEZ. As part of the broader development strategy aimed at driving sustainable economic growth and job creation in the region, the civil works component forms the backbone of the SEZ's infrastructure.

In partnership with



Atlantis Special Economic Zone Community Stakeholder Network

**Community skills activation**

**Community information session**

**Community co-creation workshop**

**Lessons learned workshop**

# Enterprise Development

## SMME Compliance

To engage in business with the government, small businesses must have five critical compliance documents in place. Over an eight-month period, ASEZCo has empowered 50 SMMEs to achieve full compliance through a series of workshops, coaching, mentoring, and information-sharing sessions. This achievement has enabled these businesses to be added to our database, spanning various sectors



**50 Compliance SMME's over  
an 8 month period**

# Enterprise Development

## Vertical and Hydroponic Farming

ASEZ is dedicated to enhancing food security by empowering small-scale farmers and home-grown businesses. We have introduced beneficiaries to innovative workshops in vertical and hydroponic farming, equipping them with the skills and knowledge to thrive.

Vertical farming represents the cutting edge of agricultural innovation, yet it remains critically underutilized. By promoting these advanced farming techniques, ASEZ is not only fostering sustainable agricultural practices but also ensuring a more resilient and secure food supply for the future



**20 Business supported  
through this initiative**

# Enterprise Development

## SMME Incubation & Acceleration

In partnership with PepsiCo, we are assisting a local small farmer through a comprehensive 36-month incubation and acceleration program. This initiative aims to empower the farmer with the necessary resources and knowledge to thrive in the agricultural sector.



**Female small-scale Farmer**

In partnership



# Enterprise Development

## Solar PV Programme

ASEZCO, in collaboration with ABSA Bank and the National Business Institute (NBI), has successfully identified and recruited local SMMEs to benefit from the Solar PV Greencard Training Programme.

The selected candidates embarked on an intensive training course provided by Nepoworx, equipping them with essential skills to enhance their business opportunities. The comprehensive course covered:

Introduction to Solar PV

Basics of Electricity

Commissioning – Operation & Maintenance

Mounting a Solar System

This initiative aims to empower local businesses with the knowledge and skills needed to thrive in the growing solar energy sector.



**10 SMEs successfully  
completed the programme**

In partnership



# Enterprise Development

## Workplace-Based Experience (WBE): Installation Repairs and Maintenance Students (IRM)

This project aimed to provide student support and guidance to enhance the understanding of work readiness, and the work application process, and also obtain work-based experience.

The ASEZ Skills Unit served as an intermediary between the host companies, academia, and students, facilitating integrated collaboration. Over 60 % of participants on this programme were women.

ASEZ's identified host companies across various sectors, including civic organizations, public and private enterprises such as the South African Police Services (SAPS), local schools, and companies like Stripfoam Packaging. This diverse range of host companies provided an opportunity for the Skills Unit to gain insights into their requirements and determine how we could support them in achieving their goals.



**44 participants successfully completed the programme**

In partnership



# Skills Development

## Artisan Recognition of Prior Learning (ARPL)

Artisan Development is a multifaceted strategy that addresses economic, social, and educational challenges in our county.

The programme supported semi-skilled welders to become certified – Red Seal Certification.

Investing in the development of artisanal skills, we at ASEZ foster growth, reduce unemployment and create a more inclusive and competitive workforce.

One of the strategies of the National Skills Development Plan (NSDP) is to produce 30,000 artisans annually by 2030. The ASEZ has once again contributed, and will continue to contribute to this strategy.



**14 participants successfully completed the programme**

In partnership



**merSETA**  
MANUFACTURING, ENGINEERING  
AND RELATED SERVICES SETA

# Skills Development

## Science, Technology, Engineering, Arts and Mathematics (STEAM)

40 learners from the local high and special needs schools are currently inclusively engaging in the STEAM programme, equipping these learners with the skills, knowledge, and values they need to contribute to a sustainable future.

This programme fosters critical thinking, interdisciplinary collaboration, and ethical decision-making. This educational approach also empowers team building and group participation. The learners we taught programming, robotics and exposed to artificial intelligence.

The learners in this programme identified new approaches to enhance their productivity in their mainstream school experience.

Next phase: Space STEM



In partnership



# Skills Development

## Annual Career Expo, The Biggest in Atlantis

This event presents an incredible opportunity for students and job seekers in the community to explore various career paths and engage with leading industries.

It not only validates the demand for specific skills but also emphasizes the importance of creating a robust skilling ecosystem.

By fostering local economic development and skills growth, and by building sustainable partnerships with public and private training providers, we are empowering the next generation to pursue meaningful careers and contribute to the future of sustainable economic progress.



In partnership

Cape Career Exhibition Association: presented by over 100+ Training Institutions and Atlantis City Mall



# 2.2 Pioneering greentech



# Atlantis Greentech SEZ – Sustainable Manufacturing Lab

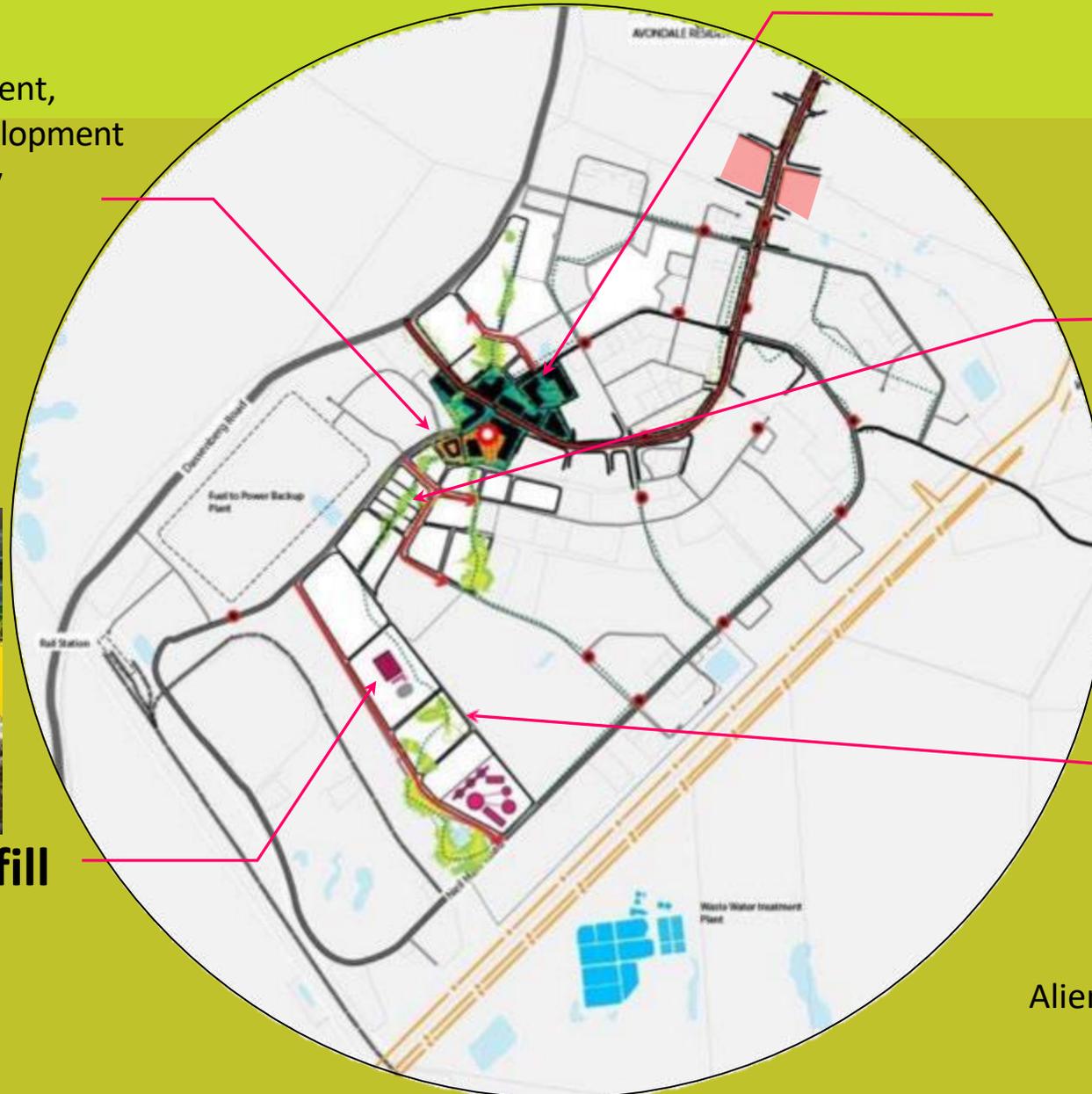
## Inclusion

Skills development,  
Enterprise development  
and community  
inclusion  
– just transition



## Net zero waste to landfill

e.g. Industrial symbiosis  
e.g. Material recovery facility



## Net zero carbon



## Net zero water



## Working with nature

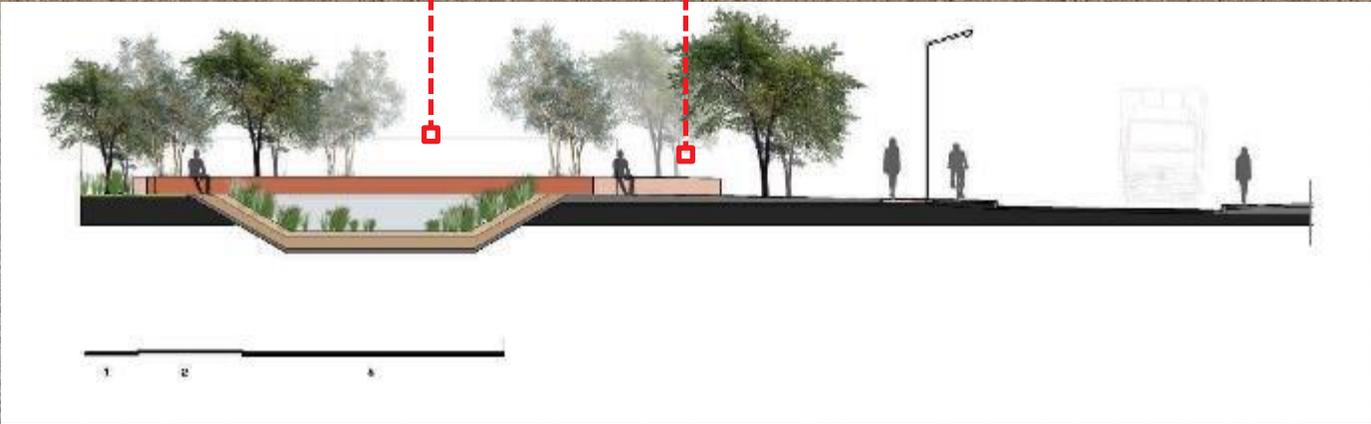
Alien clearing, search and rescue and  
indigenous landscaping

# Atlantis SEZ for Green Technologies

# Civils Zone 1 Architectural Concept: Entrance Area



Entrance View



# Civils Zone 1: Entrance Area



# Quantum V3 Factory





MMIH – Battery Assembly Plant



# Solar installation

## Key aspects

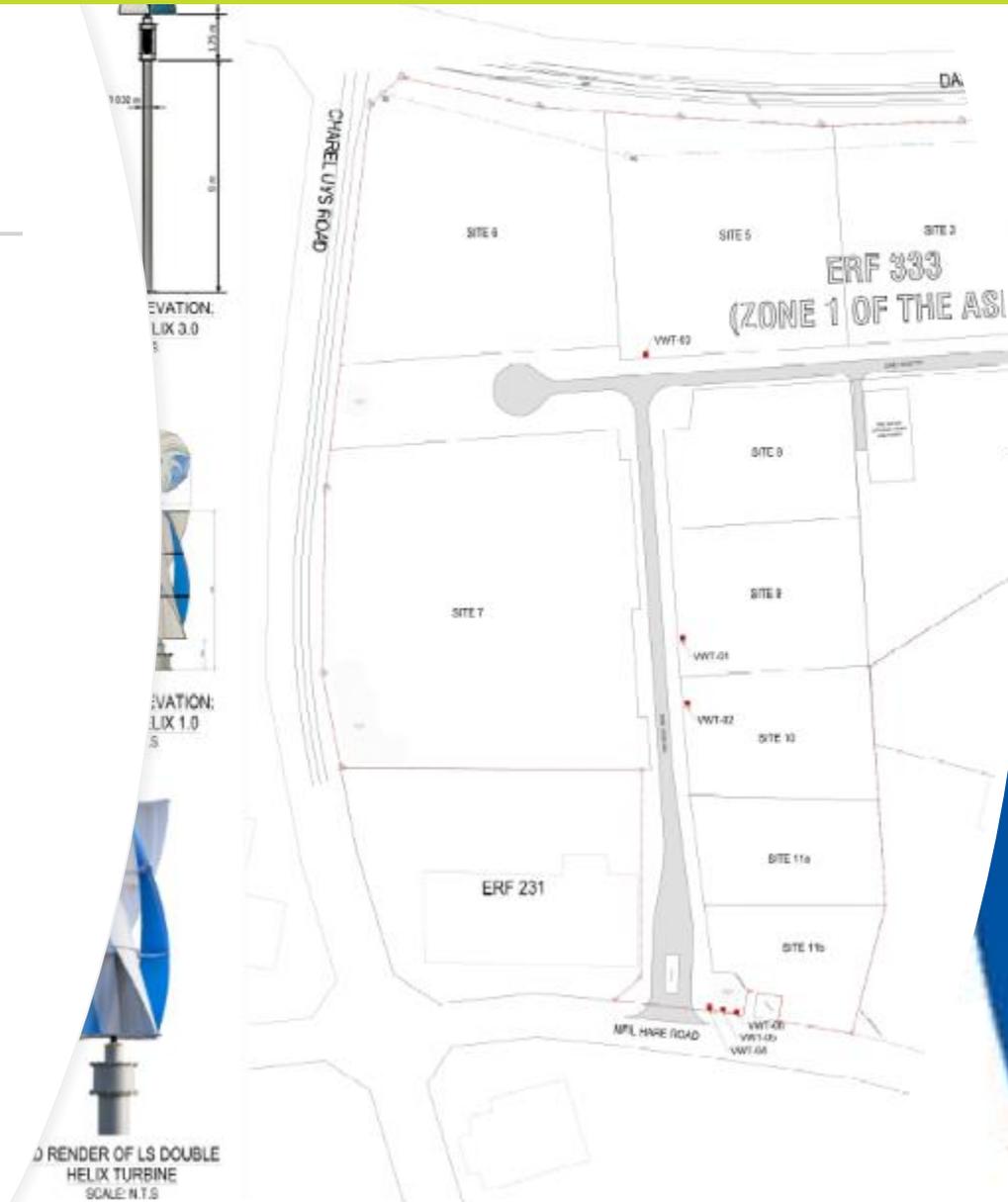
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- 40% less carbon by 2030
  - Carbon neutral by 2050
  - Maximise solar deployment on factory roof space (including batteries)
  - Maximise solar on other structures/ground mounted
  - Introduce wind turbines
  - PPAs
  - Consider bioenergy/green hydrogen as a long-term possibility
  - Pilot Projects
- 



# Energy Systems Africa (ESA) Wind Turbine Trial

- Deploy 1kW and 3kW wind turbines.
- Output measured over a full year.
- Advantage: 24h electricity generation.
- Disadvantage: Expensive relative to solar photovoltaics.
- Test: Determine whether it has a segment in the ASEZCo energy mix.



3D RENDER OF LS DOUBLE HELIX TURBINE  
SCALE: N.T.S



# Solar Earth Solar Paver Trial

- Solar paver trial planned for Zone 1 sidewalks
- The output and resilience will be measured throughout the lifespan
- Advantage: Added value to sidewalk infrastructure
- Disadvantage: Expensive relative to solar photovoltaics
- Test: Measure the commercial breakeven and lifespan of the pavers



# Lighting and Landscaping

Solar streetlights are being installed Zone 1

- Each camera requires 50W to function.
- Each pole upon which they're mounted has 400W of solar generation capacity.
- Each pole also has a large lithium battery of 1,2kWh storage capacity.
- This means that the cameras can run on battery power for up to 24 days.





# HYENA Hydrogen Generator Trial

- Partner with HYENA to facilitate a 4kW hydrogen generator pilot
- Transition to renewable dispatchable energy sources
- Advantage: Dispatchable power that is more sustainable than diesel
- Disadvantage: Not yet cost-effective
- Test: Validate the performance in an industrial setting



# Plastic Asphalt

- Entire section of road in Zone 1 has been built using a bitumen/plastic blend (Resin8) in the wearing course.
- This is not a pilot, as it has been successfully piloted in the Eastern Cape.
- Non-recyclable plastics



3.1

# Partnerships



# Atlantis SEZ and its government partnerships

The Atlantis Special Economic Zone (ASEZ) sees itself as a development intermediary with partnerships and collaboration as a key enabler. Within that it is part of an ecosystem of government departments and funded agencies geared towards creating jobs and growing the economy. Our partnerships are our lifeblood. In this ecosystem the ASEZ is an asset in the hands of our partners.

## Our key investment ecosystem partners



Licence holder, shareholder, ops funding



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

Shareholder, investment support



Partner in green economy market development



Partner in investment promotion



the dtic  
Department  
Trade, Industry and Competition  
REPUBLIC OF SOUTH AFRICA

National custodian of SEZ programme, Invest SA



national treasury  
Department  
National Treasury  
REPUBLIC OF SOUTH AFRICA

Tax incentives

where green tech grows



# Greentech Partnerships



# Integrated Ecosystem Development – impact multipliers

Some of our partners...

## Skills Development



## Enterprise Development



## Community Partnerships



Western Cape  
Government  
FOR YOU



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

where green tech grows



# The Atlantis Special Economic Zone Awards 2024



Eco-Logic Climate Change Award



Mail & Guardian Greening the Future Awards (Green Finance Category)



Top Sustainability Zone in Africa – fDi Intelligence Global Free Zones of the Year 2024 Awards



Thank you