

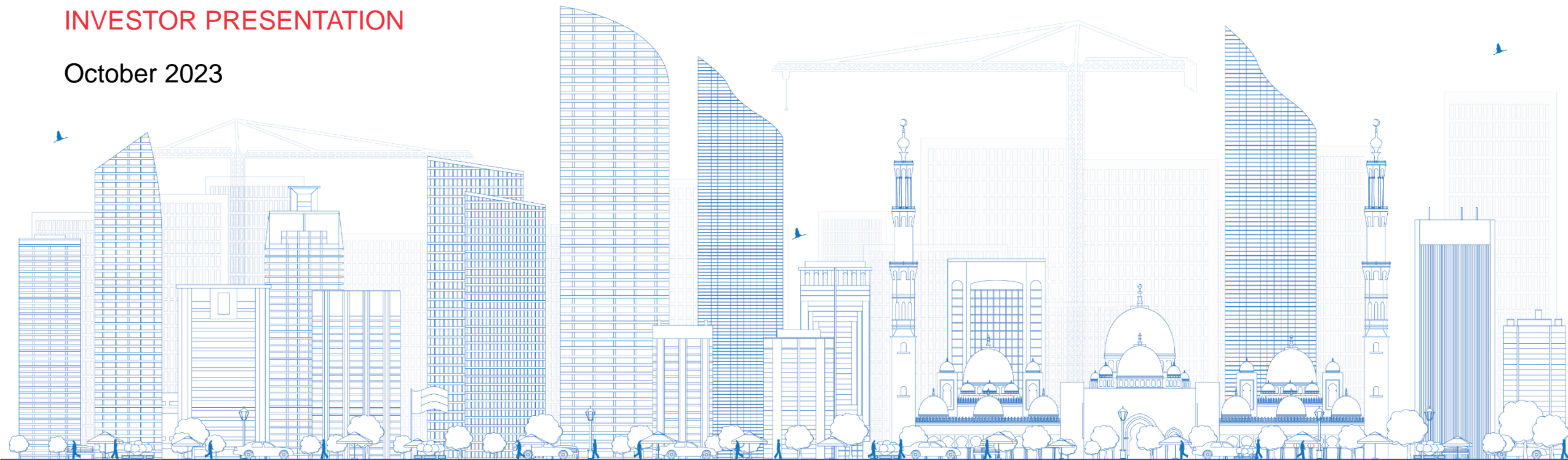


Investing in Abu Dhabi

Investment Teaser: Lighting Systems

INVESTOR PRESENTATION

October 2023



1-pager



Abu Dhabi Government Demand Localization: Lighting Systems Investment Opportunity

Local and regional import substitution potential



Program

- The **Abu Dhabi Government Demand Localization** program aims to **leverage the Government's purchasing power – \$37Bn by 2028** in scope for the program – to Localize high demand products and services and thus further develop the local business ecosystem.
- Access to Government demand** is designed to act as a **springboard for new investors** as they scale to capture local and regional demand.

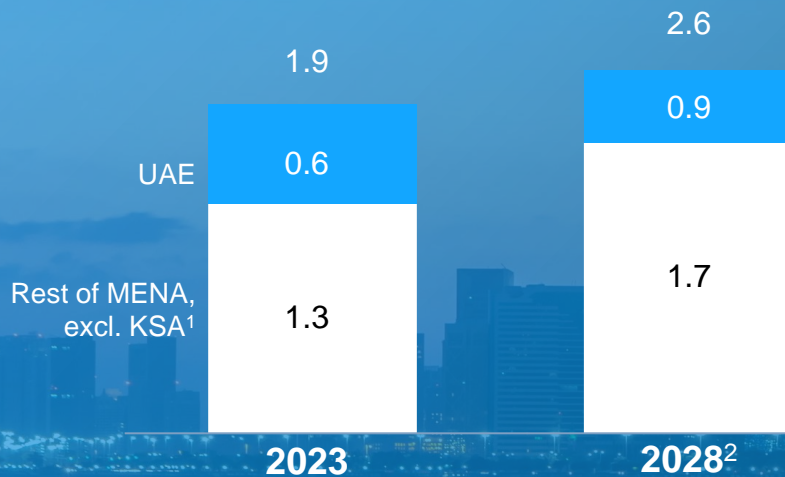


Investment Opportunity

- Establish a **medium-sized facility** with parallel assembly and production lines for Lighting systems:
- Focus on **import substitution** of finished goods, with **additional potential upside** from aftermarket operations (*not accounted for in the calculations*)
- Opportunity to **serve the local UAE market**, as well as to **export to the broader GCC and MENA regions**, with the exception of Saudi Arabia

Target Addressable Market, USD Bn

Imports of assembled Lighting units for local consumption



Indicative Business Case:

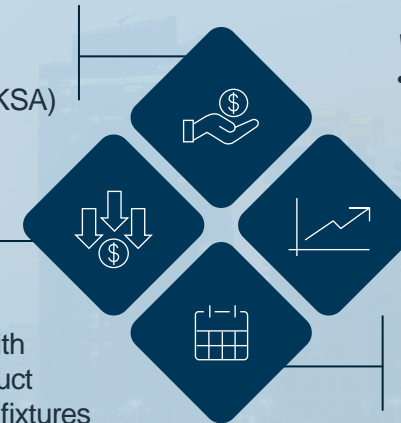
Greenfield Project for Medium-Sized Lighting Assembly and Manufacturing Plant

\$145Mn Revenue Potential

- Substitution of 10-12% of UAE imports of assembled units
- Substitution of 2-3% of regional (MENA, ex. KSA) imports of assembled units
- 65/35% split of local sales to exports

\$70Mn CAPEX (60% financed)

- Medium-sized facility (~20,000m²) with assembly capabilities across all product types and in-house manufacturing of fixtures (housing)



~15% IRR with further upside potential

- Return on investor's equity contribution, assuming 60% of required CAPEX financed through local banks

7 years Payback

- Estimated time to recover the equity investment



Access to Gov't Demand

- Framework Agreements**
- Preferred Vendor List**

Key Government Buyers (c.a. USD 37Mn p.a.)

هيئة أبوظبي للإسكان
ABU DHABI HOUSING AUTHORITY



طائرة البلديات والنقل
DEPARTMENT OF MUNICIPALITIES
AND TRANSPORT



دائرة التعليم والمعرفة
DEPARTMENT OF EDUCATION
AND KNOWLEDGE



دائرة الثقافة والسياحة
DEPARTMENT OF CULTURE
AND TOURISM



دائرة الصحة
DEPARTMENT OF HEALTH



1) As a conservative scenario, exports to the Kingdom of Saudi Arabia are considered as low probability. 2) Estimated imports based on expert input and market reports, assuming current levels of local production.

Source: UN Comtrade, Abu Dhabi Customs, Abu Dhabi Department of Economic Development, Abu Dhabi Department of Government Enablement

3-pager



Abu Dhabi Government Demand Localization

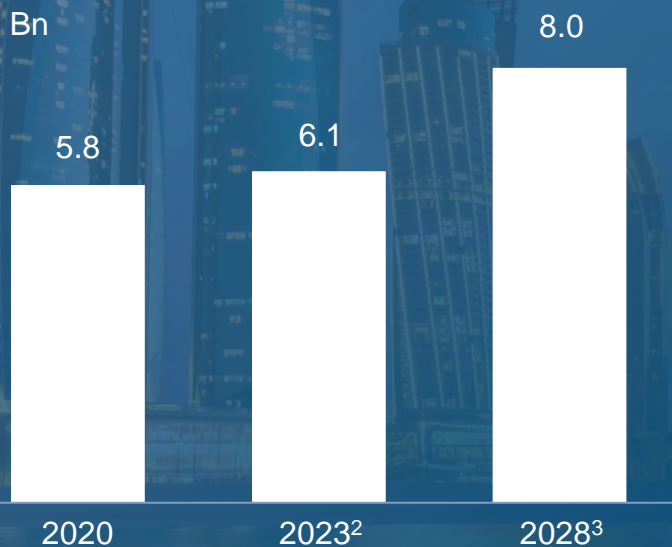
Investment opportunities backed by the Government's purchasing power

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USD 37Bn+ in cumulative spend
in the next **5 years** by **Abu Dhabi
Government Entities...**

Evolution of Government Procurement Budget
In Scope for the Program¹,

USD Bn



...across key sectors...



Construction & adjacent industries



Infrastructure



Education



Digital and Technology



Sports



Transportation



...other strategic sectors

...unlocking new investment opportunities



Products (not exhaustive)

☐ Lighting systems **Detailed Next**

☐ HVAC systems

☐ Electrical equipment

☐ Pumps

☐ Elevators

☐ Machinery

☐ Furniture



Services (not exhaustive)

☐ Architecture

☐ Engineering

☐ Development

1) Potential for further budget increase from scope expansion. 2) On track to reach or exceed budgeted procurement for 2023. 3) Estimated based on government strategy, project pipeline, and macro-economic forecasts.
Source: Abu Dhabi Department of Government Enablement, UN Comtrade, Abu Dhabi Customs

Opportunity Business Case: Lighting Systems

Local and regional import substitution potential

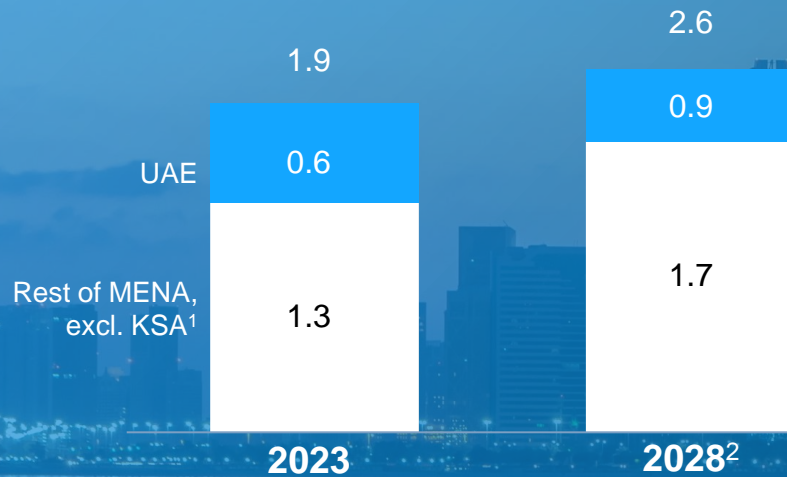


Investment Opportunity

- Establish a **medium-sized facility** with parallel assembly and production lines for Lighting systems:
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Lighting Systems: Additional Government Support

Procurement-driven investor incentives

The **Abu Dhabi Government** is an **end buyer of Lighting systems**, mainly through its development projects of residential, cultural, and educational facilities.

In addition to the incentives offered to all Abu Dhabi investors, the Government can offer **additional incentives to Lighting investors**.

Preferred Vendor List

Inclusion on the preferred vendor list of the Abu Dhabi Government Entities, ensuring **Lighting investors** are **invited to all relevant tenders**.

Framework Agreements¹

Inclusion on an Abu Dhabi Government framework agreement giving HVAC investors **further access to streamlined government Lighting systems procurement**, with potential for preferred payment terms.

Key Government Buyers

هيئة أبوظبي للإسكان
ABU DHABI HOUSING AUTHORITY



دائرة الثقافة والسياحة
DEPARTMENT OF CULTURE AND TOURISM



دائرة التعليم والمعرفة
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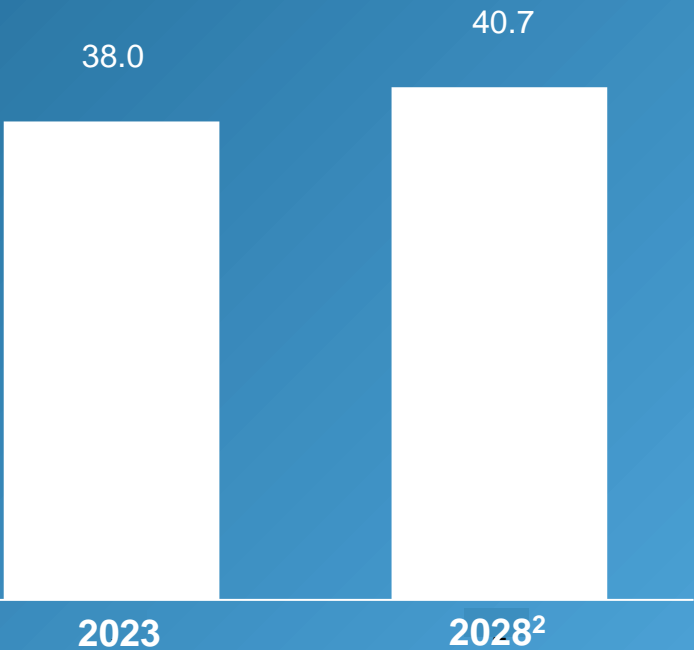


دائرة الصحة
DEPARTMENT OF HEALTH



USD 235Mn+ in **cumulative indirect spend** in the next **5 years** by **Abu Dhabi Government Entities**

Abu Dhabi Government Indirect Procurement, USD Mn



1) The Department of Government Enablement (DGE) will lead the implementation of the framework agreement in coordination with the selected investor. DGE's mandate is to put in place government wide framework agreements with access to all government entities.

2) Estimated figures, given Government spend is indirect; estimation based on cost breakdown of Tier-1 suppliers of directly procured services covering in-scope product in their value chain.

Source: Abu Dhabi Department of Government Enablement, Abu Dhabi Department of Finance, expert interviews

Extended deck



Executive Summary

1

Abu Dhabi 2030: Economic and Social Powerhouse

- **Economic powerhouse** accounting for half of UAE's GDP
- **World class** digital and physical **infrastructure**
- **Top investment destination** with an established business ecosystem and special investment zones

2

Abu Dhabi Government: Catalyst for Investor Success

- Comprehensive **business incentive schemes**
- **Government-driven investment programs** across strategic sectors
- **Significant government purchasing power**, with **USD 37Bn** in cumulative procurement budget by 2028

3

Investment Opportunity: HVAC Systems

- Opportunity to **substitute local and regional imports** – a total addressable market of **USD 2.6Bn** by 2028 – through the assembly and production of **Lighting systems**
- **Access to government procurement** through Framework Agreements and Preferred Vendor Lists
- **Attractive business case**, with USD 145Mn+ in revenue potential and 15% expected IRR

1

Abu Dhabi at a Glance

GCC's economic and social powerhouse



Abu Dhabi's GDP is **USD 299Bn¹**, >50% of UAE's GDP and **53% non-oil contribution**



No.1 in West Asia region by FDI, with USD 21Bn inflows in the UAE in 2021

AA

Abu Dhabi Government credit rating



No. 1 for ease of doing business in the Middle East and **10th globally**



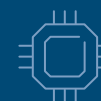
1,000+ global destinations connected to **Khalifa Port**



2nd fastest 5G connection in the world and **Smartest City** in MENA



Global hub - **80% of the world's population** within an eight-hour flight



World-class education - home to the **world's first AI university**



Consistently ranked as the **most livable city in MENA** and **safest city in the world**

Investment Outlook

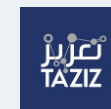
Attractive investment destination with streamlined procedures

The Abu Dhabi Advantage

- 100% foreign ownership of companies
- 94 tax agreements with foreign nations
- 9% corporate and income tax with low VAT rate of 5%
- Special economic zones with up to 100% profit repatriation
- No minimum requirement company setup
- Stable currency pegged to the US Dollar (USD 1 = AED 3.6725)
- UAE FDI inflow climbed to USD 21Bn in 2021
- Readily available capital for state-of-the-art technology
- Electricity generation capability and inexpensive energy
- Capital availability: equity/debt via local market – venture funds, banks, family offices, private equity funds, sovereign wealth funds (among the largest in the world)
- Attractive leasing of office and warehouse space in addition to competitive prices for land and utilities
- AA credit rating¹ for Abu Dhabi's Government, reflecting high GDP per capita and strong fiscal and external metrics

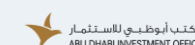
Investment Ecosystem Enablers *(not exhaustive)*

Investment Zones



Key Enabling Government Entities

دائرة التنمية الاقتصادية
DEPARTMENT OF ECONOMIC DEVELOPMENT



دائرة التمكين الحكومي
DEPARTMENT OF GOVERNMENT ENABLMENT



UNITED ARAB EMIRATES
MINISTRY OF INDUSTRY
& ADVANCED TECHNOLOGY



استراتيجية
أبوظبي الصناعية
ABU DHABI
INDUSTRIAL
STRATEGY

HUB71



Key Enabling Semi-Government Entities *(Not exhaustive)*

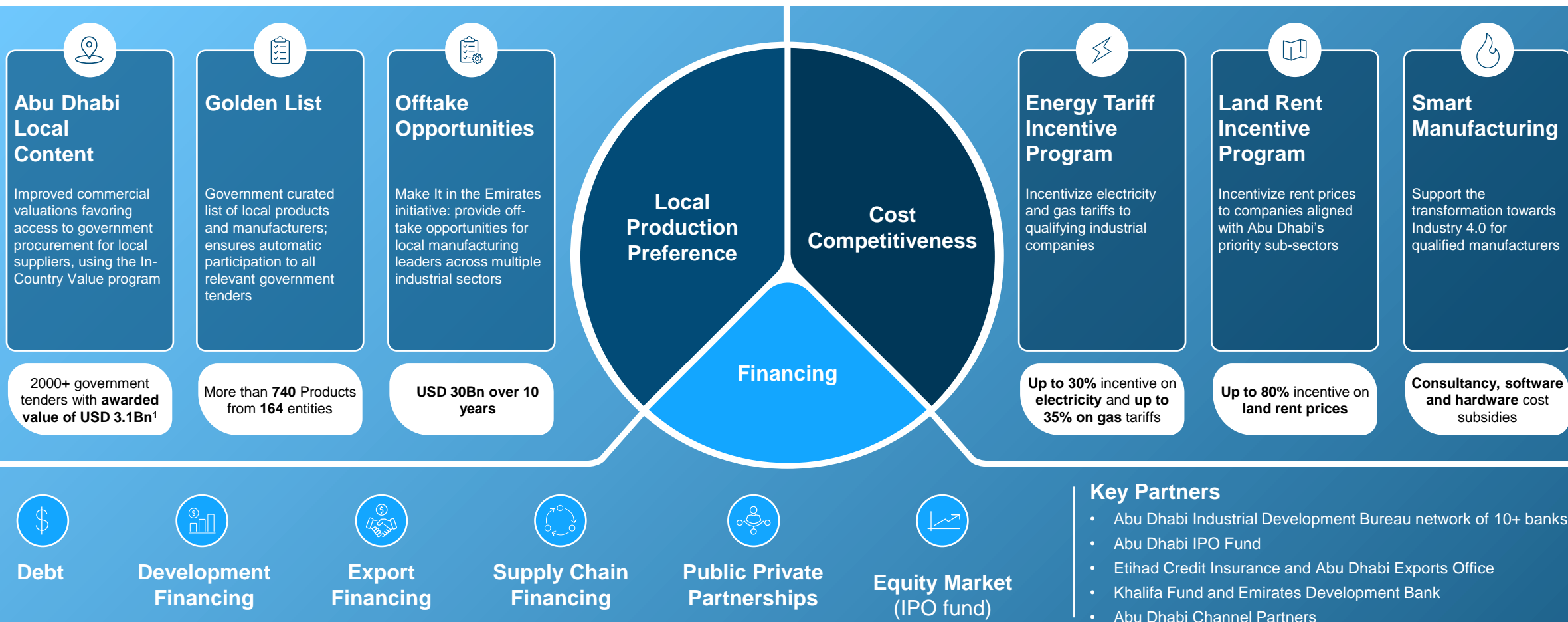


1) Fitch Ratings

Source: UAE Ministry of Economy, Abu Dhabi Department of Economic Development, Abu Dhabi Investment Office

Investor Incentives

Attractive business and regulatory environment



All services are accessible to investors through TAMM, Abu Dhabi's unified digital system for government services and information

1) 2021 statistics.

Source: Abu Dhabi Department of Economic Development, Abu Dhabi Investment Office, Abu Dhabi Department of Government Enablement

2 Government-Led Investment Programs

Unified effort to identify key investment opportunities in Abu Dhabi

The Abu Dhabi government is committed to identifying and providing attractive investment opportunities for local and international investors

دائرة التنمية الاقتصادية
DEPARTMENT OF ECONOMIC DEVELOPMENT



دائرة التمكين الحكومي
DEPARTMENT OF GOVERNMENT ENABLEMENT



Abu Dhabi Government Demand Localization

Services and end-product manufacturing in sectors with high government spend

- Construction & adjacent industries
(e.g., machinery, electrical equipment)
- Infrastructure
- Education
- Digital & Technology
- Transportation
- Sports
- ...other strategic sectors

Detailed Next

Abu Dhabi Channel Partners

End-product manufacturing in strategic industrial sectors

- Chemicals
- Food processing
- Machinery
- Pharmaceuticals
- Transportation
- Electrical equipment
- Electronics



Investment
Scope



Key Sectors

Abu Dhabi Government Demand Localization

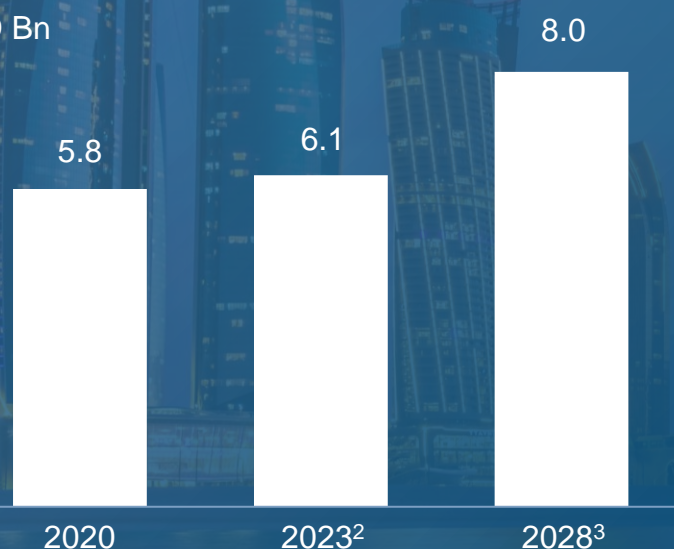
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USD Bn



...across key sectors...



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Sports



Transportation



...other strategic sectors

...unlocking new investment opportunities



Products (not exhaustive)



Lighting systems

Detailed Next



HVAC systems



Electrical equipment



Pumps



Elevators



Machinery



Furniture



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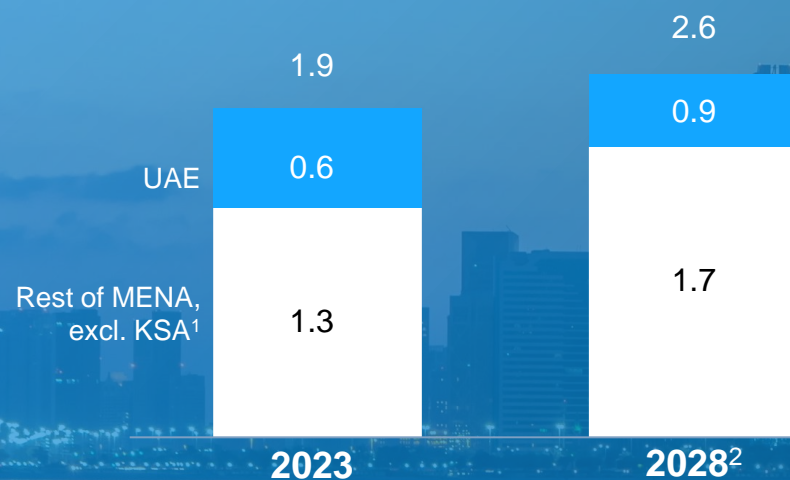


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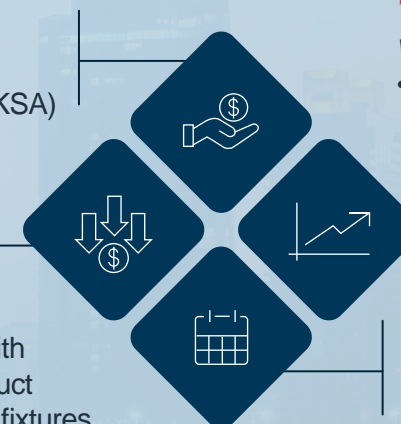
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Lighting Systems: Additional Government Support

Procurement-driven investor incentives

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Preferred Vendor List

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Key Government Buyers

هيئة أبوظبي للإسكان
ABU DHABI HOUSING AUTHORITY



دائرة الثقافة والسياحة
DEPARTMENT OF CULTURE
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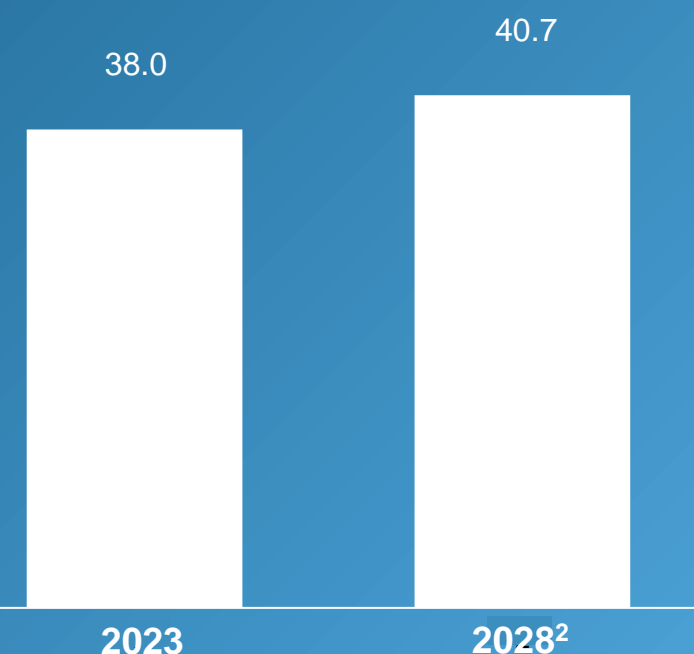


دائرة الصحة
DEPARTMENT OF HEALTH



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Abu Dhabi Government Indirect Procurement, USD Mn



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² Estimated figures, given Government spend is indirect; estimation based on cost breakdown of Tier-1 suppliers of directly procured services covering in-scope product in their value chain.

Source: Abu Dhabi Department of Government Enablement, Abu Dhabi Department of Finance, expert interviews

Take your first steps into Abu Dhabi



Next Steps

1. Review investment materials
2. Meet ADIO
3. Confirm interest (MoU)
4. Start feasibility analysis

Indicative Timeline

October 20th – October 27th

October 27th – November 3rd

November 3rd – November 10th

November 10th – November 17th



+971 2 403 1003



e.management@adio.gov.ae



investinabudhabi.gov.ae



InvestAbuDhabi



Abu Dhabi Investment Office

APPENDIX

Lighting Systems

Detailed Opportunity Card

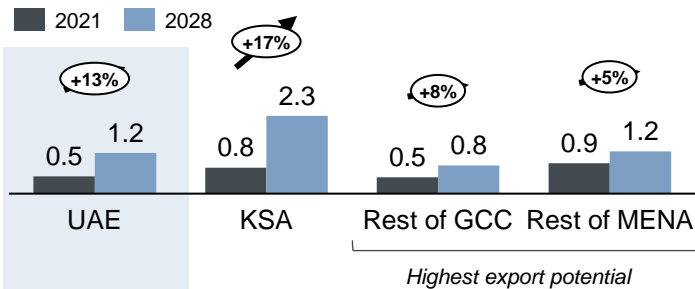


Executive Summary: Lighting Systems

Backward integration of Lighting systems, with standalone assembly or assembly and manufacturing of select components, with the objective to fill local and regional supply gaps through import substitution.

Market Insights

Imports for Local Consumption, Assembled Units and Parts, USD Bn



- Significant **local and regional supply gaps**, with **import substitution** potential across MENA expected to reach **USD ~5Bn** by 2028; **USD ~25Bn cumulative** in the next 5 years
- Demand from Abu Dhabi Government entities** is expected to reach **USD ~40Mn** by 2028; **USD 230Mn cumulative** in the next 5 years

UAE Overview

High Potential for Incremental Localization

Current Localization Levels, Assembly and Manufacturing



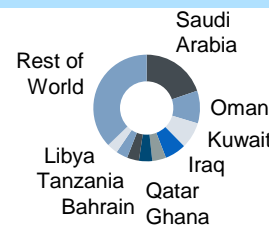
Available Local Players for Potential JVs



- Small local players
- In the UAE, operations are mostly in sales

Established Regional Logistics Hub

UAE Lighting Exports and Re-Exports by Country, 2021, %



- Local assemblers in residential, commercial and industrial lighting cover <10% of the market demand; however, the Street segment is highly localized (~40-50% of demand)
- Local and regional developers prefer suppliers in China because of its advanced LED technology and competitive prices driven by large-scale production capabilities.
- The majority of imports in the UAE are in finished/assembled goods

Business Case

Focus of this opportunity

Base Scenario

R&D and Design

Manufacturing

Assembly

Services

- Lighting fixtures
- Switches and dimmers

- Residential
- Commercial/ industrial

Sample Case: Greenfield Project for Medium-Sized Lighting Assembly and Manufacturing Plant

High Potential: Imports of Assembled Units, Year 5, USD Bn

Market capture:

6%

UAE
MENA, ex. KSA

\$145Mn
Revenues

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\$70Mn
CAPEX (60% financed)

- Medium-sized facility (~20,000m²) with assembly capabilities across all product types and in-house manufacturing of heat exchangers

15%
IRR

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7 years
Payback

- Estimated time to recover the initial equity investment

Abu Dhabi Value Proposition

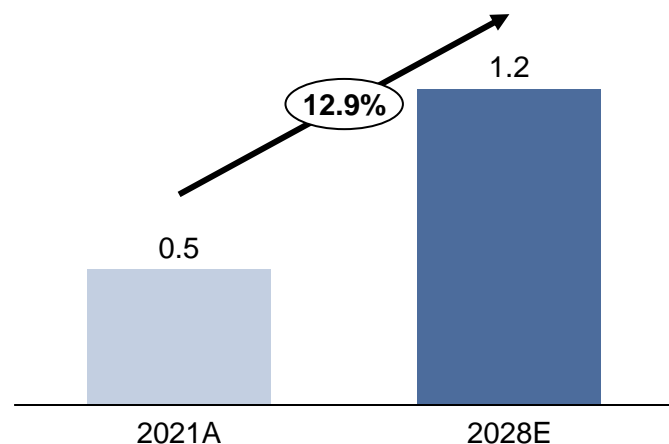
- Preferential treatment** for local production through Abu Dhabi Golden List and access to local and federal **indirect government procurement**
- Enhanced **cost competitiveness** through various **incentive schemes**, such as Energy Tariff, Land Rent, Smart Manufacturing programs
- Access to **low-cost financing for operations and trade** through the Abu Dhabi Industrial Development Bureau banks network, Abu Dhabi Exports Office, Emirates Development Bank, Khalifa Fund, among others
- Global and regional market access** through Economic Partnership Agreements and GAFTA agreements, supported by Abu Dhabi's **global logistics hub**

3

Abu Dhabi is uniquely positioned to ensure investor access to both local and regional markets, all with the full support of the Abu Dhabi Government ecosystem

Access to UAE Demand

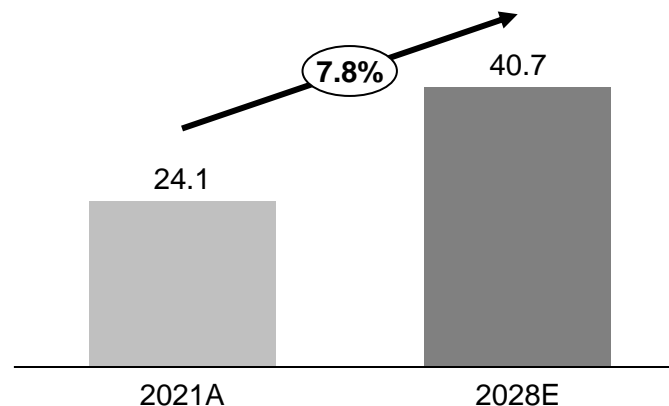
UAE Lighting Systems Imports for Local Consumption, USD Bn



- Imports are estimated to account for >90% of the local demand for lighting systems in residential and commercial segments and ~50% of the street segments
- Imports are 80% finished lighting system units and 20% parts
- Opportunity to establish JVs with local UAE players, such as Emirates Lighting

Access to Government Procurement

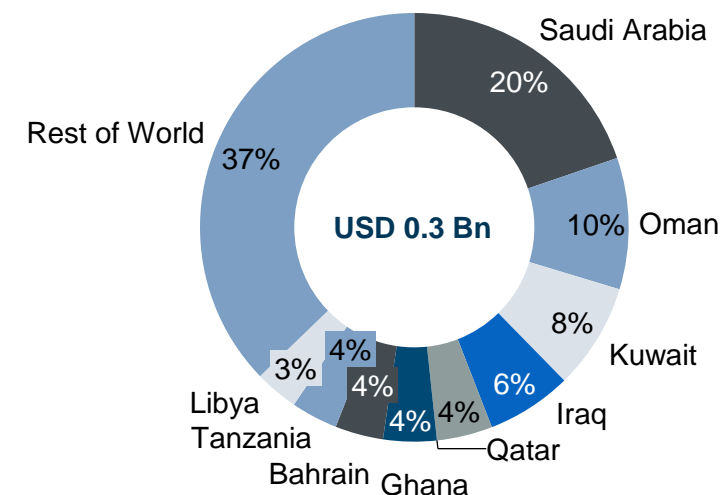
Abu Dhabi Government Indirect Procurement, USD Mn



- USD24Mn in annual spend from Abu Dhabi Government Entities, such as ADHA¹ and DCT²
- In addition to the Abu Dhabi-specific opportunity above, investors could leverage MoIAT³ Product Offtake Initiative at federal level to tap into the USD6Mn in cumulative procurement over 6 years dedicated to lighting products from key semi-government buyers (e.g., Aldar, ADNOC)

Access to Regional Markets

UAE Lighting Systems Exports and Re-Exports by Country, 2021, USD Bn



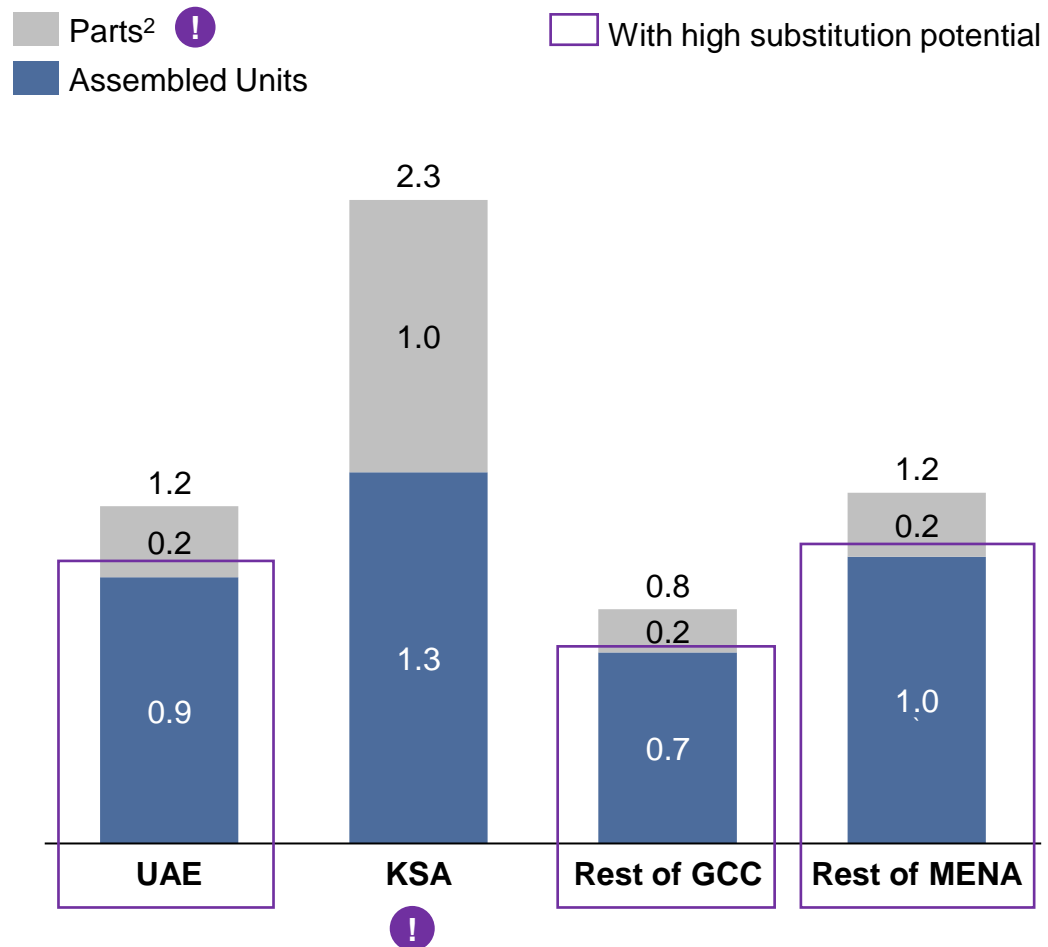
Opportunity to leverage UAE's and Abu Dhabi's regional status as a competitive advantage to substitute lighting systems imports in MENA

- UAE and Abu Dhabi is a major logistics hub, with established supply chains into the GCC and MENA
- In addition, regional market access is supported by existing trade agreements (e.g., GAFTA)

3

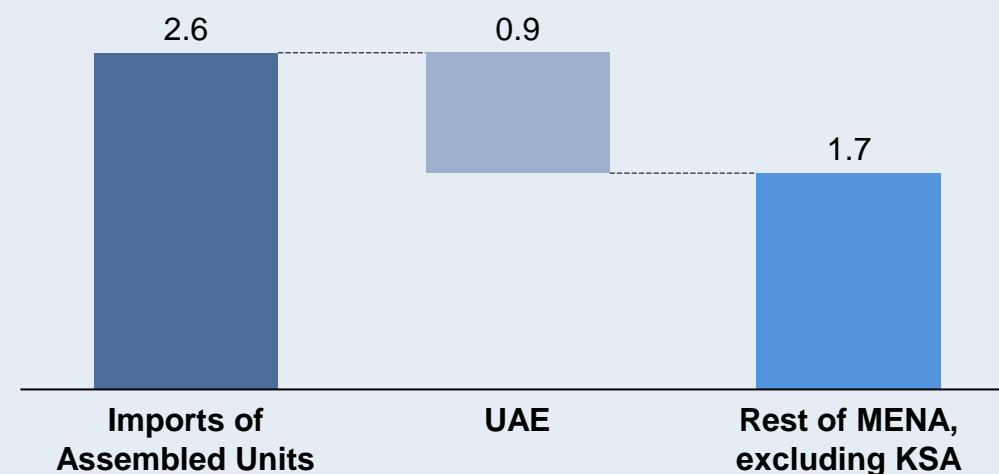
Local and regional segments with high substitution potential are expected to reach USD 2.6Bn by 2028

Estimated Total Imports¹ for Local Consumption, USD Bn, 2028



High Potential Segments: Imports of Assembled Units in Select Geographies, USD Bn, 2028

Imports of Assembled Units in UAE and MENA, but excluding KSA given high barriers to entry and competing localization efforts

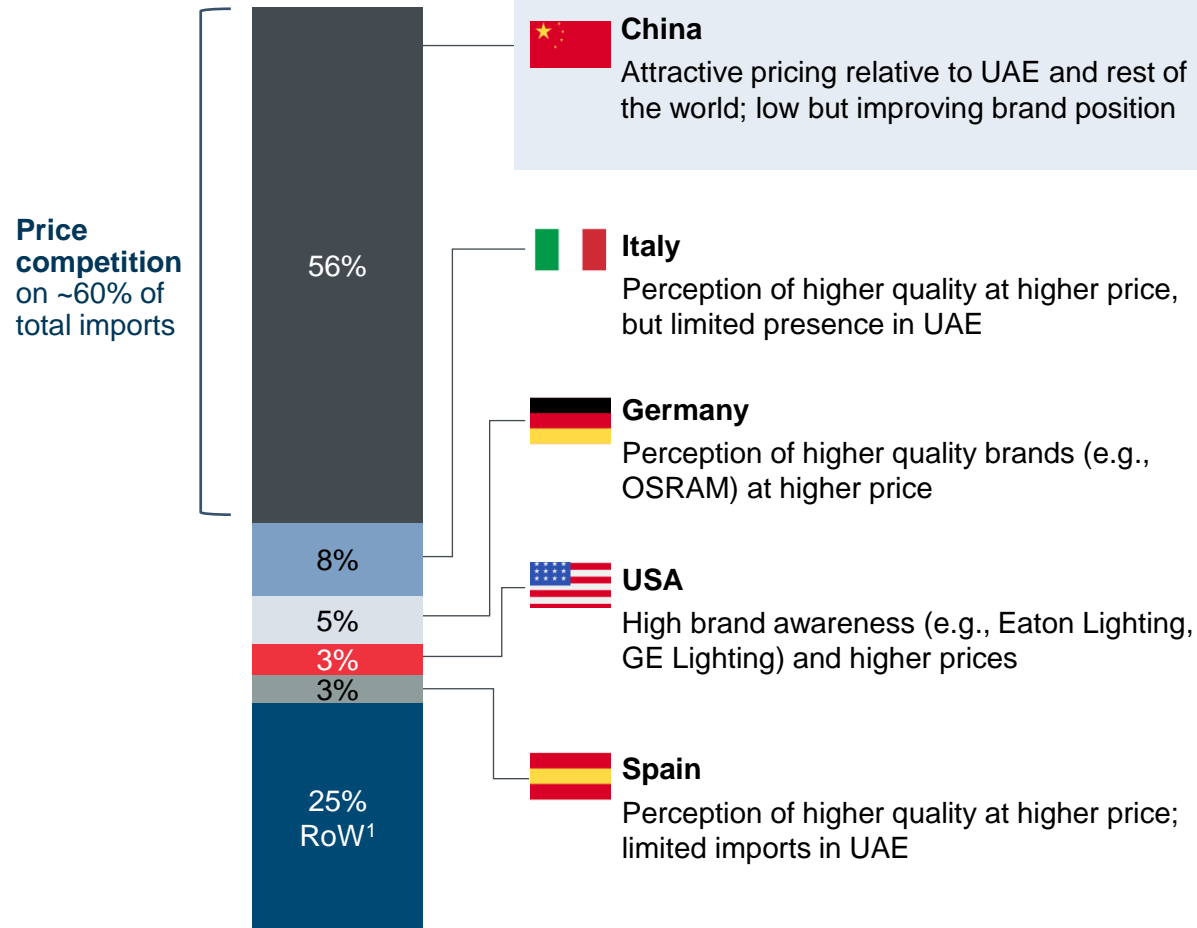


Exclusions:

- ! **Parts:** high barriers to entry in main estimated use case, severe price competition, high volume requirements for profitability, and technological requirements for select components.
- ! **KSA Market:** demand difficult to capture given country's own localization agenda and trade barriers in place
NOTE: KSA localization focus is mainly on internal demand

Successful import substitution will require narrowing the price gap with lower cost suppliers, achievable through Abu Dhabi government support and economies of scale

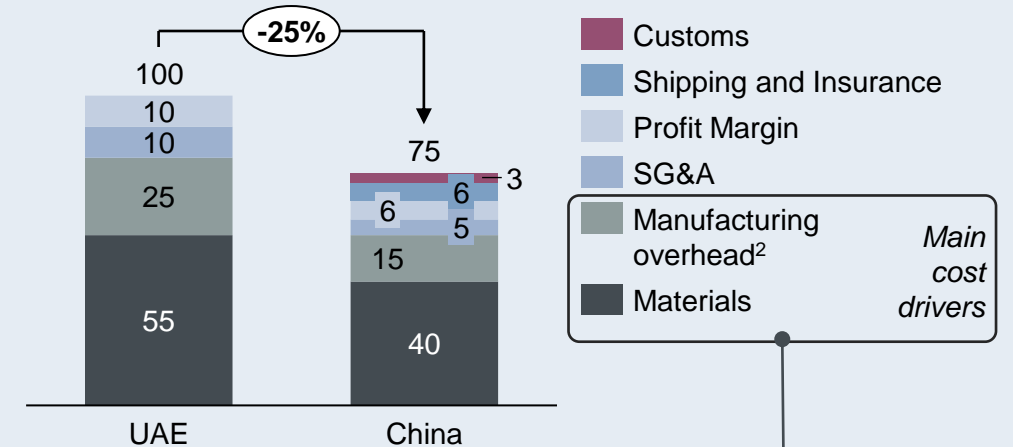
MENA Imports of Assembled Units by Source Country, 2021, AED Bn



Note: 1) RoW: Rest of World. 2) Includes labor, other operating expenses, equipment depreciation
Source: UN Comtrade, expert interviews, desktop research, PwC analysis

Example: Estimated Cost Comparison of Lighting System Unit
UAE production vs. Import from China

The cost of a shipped lighting system unit from China is ~20-25% lower than one currently assembled locally



Potential Cost Offsetting Levers

















- Manufacturing overhead:** Abu Dhabi government incentive schemes, such as (i) the Energy Tariff Incentive Program (energy and gas offsets of 30% and 35%), (ii) Land Rent Incentive Program (up to 80% offset of land rent costs) or (iii) Smart Manufacturing Program, among others
- Materials:** levers such as (i) duty exemptions for raw materials, and (ii) economies of scale, made possible by local manufacturers' enhanced regional market access

3

The opportunity focuses on backward integration of Lighting systems: standalone assembly or combined with manufacturing of select components

○ Low ● High

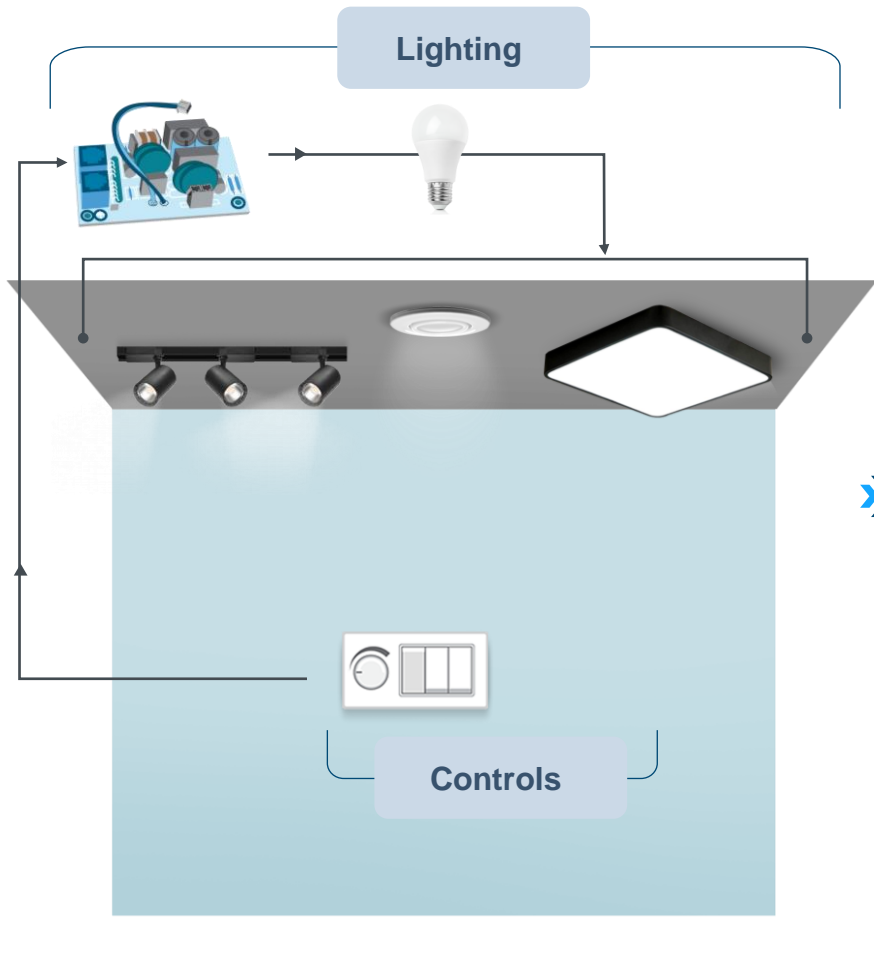
➡ Focus of this opportunity

	R&D and Design	Manufacturing	Assembly	Services	Localization Opportunity
 Description	<ul style="list-style-type: none"> Both R&D and IoT are crucial in advancing new smart lighting systems, especially as wireless controls are gaining popularity 	<ul style="list-style-type: none"> Manufacturing of Lighting components e.g. fixtures, lamps, controls and other smaller parts like drivers, ballasts and surge arresters 	<ul style="list-style-type: none"> Assembly of sub-components to produce a complete Lighting system 	<ul style="list-style-type: none"> Distribution Installation, maintenance, repair, and support of a Lighting system post-sale 	<p>Backward integration:</p> <p>A Assembly of lighting systems</p> <p>B Assembly of lighting systems and manufacturing of select value-added components</p>
 Potential for Localization	<p>●</p> <ul style="list-style-type: none"> Limited R&D and Design activity in the UAE, as function is retained at international manufacturer or OEM Customized design specifically for fixtures (casing) can be localized 	<p>◐</p> <ul style="list-style-type: none"> International brands account for 80-90% of the market Medium-to-high potential to localize fixtures, and switches and dimmers, particularly if combined production Light sources (e.g. LEDs) primarily imported 	<p>◐</p> <ul style="list-style-type: none"> Local lighting assemblers cover only 10% of the market demand The majority of imports in the UAE are in finished/assembled goods Potential to develop a local champion 	<p>◐</p> <ul style="list-style-type: none"> Distribution, installation and maintenance are largely localized by local players and international companies with offices in the UAE 	<p>NOTE: A backward integration approach is aimed at minimizing business risk through integration of low-capex value chain elements first, making the localization of assembly has an optimal expected risk-return ratio</p>
 Key UAE Market Players		 ()  	 ()  	 ()   	

3 The localization opportunity spans lighting and controls

Lighting Systems: Key Elements

Representative scheme; may vary across Lighting system types



%

Share of complete Lighting system cost

	Lighting	Controls
Description	<p>65-70%</p> <p>Comprises interconnected components used to create artificial light powered by electrical current.</p>	<p>25-30%</p> <p>Manage electrical current flow, as well as light intensity and brightness.</p>
End products	<ul style="list-style-type: none"> • Downlights • Spotlights (Directional lights) • Table/ Floor lights • Streetlights¹ 	<ul style="list-style-type: none"> • Switches • Dimmers • Sensors
Key buying criteria	<ul style="list-style-type: none"> • Aesthetics • Energy efficiency • Price 	<ul style="list-style-type: none"> • User interface • Control protocol (centralized vs. decentralized) • Smart capabilities

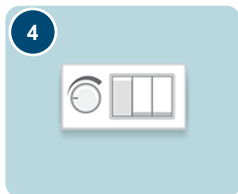
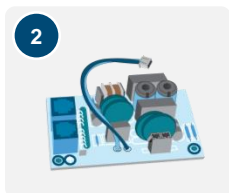
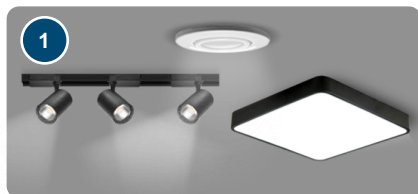
Note: 1) Low localization potential, streetlights are already localized, especially casing (i.e., metal part)
Source: Expert interviews, PwC analysis, desktop research

3

Assemblers can source locally up to 25% of a complete Lighting system, with further localization potential for switchers and dimmers

Overview





Representative scheme; may vary across Lighting system types




- Downlights
- Spotlights (Directional lights)
- Table/ Floor lights

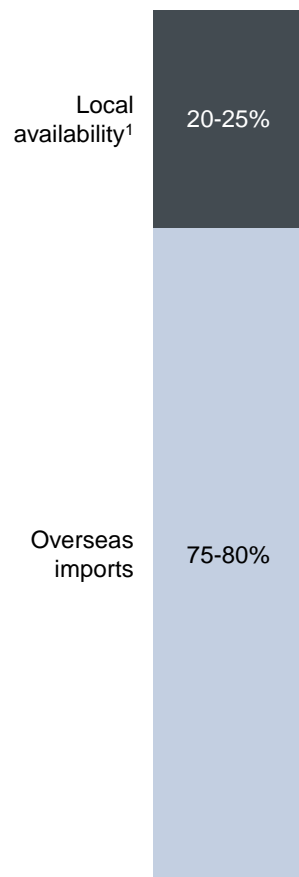
End Products

Value chain breakdown by key components

Components	Function	% Value of Assembled Unit	Potential Sourcing
1  Fixtures (Housing)	Protective or decorative enclosure that disperses the light	20-25%	<ul style="list-style-type: none"> Established Lighting systems players typically manufacture this component in-house Can be produced locally by metal sheet manufacturers
2  Light emitter	Emits light when electricity flows through	15-20%	<ul style="list-style-type: none"> Mainly imported, given volume requirement to operate profitably
3  Driver and other electronics	Provide interface b/w system and controls; regulate current and voltage	20-25%	<ul style="list-style-type: none"> Mainly imported, given volume requirement to operate profitably
4  Switches and dimmers	Manage electrical current flow, and light intensity and brightness	25-30%	<ul style="list-style-type: none"> Mainly imported from OEMs specialized in controls across industries Increasing trend of in-house manufacturing by established Lighting players

 Potential for in-house production (detailed next)



Value chain breakdown by sourcing, %



3

In addition to assembly, in-house manufacturing of fixtures and switches and dimmers should be considered

Ease-of-Localization: ● High ● Low ✓ Available in the UAE

Component	Production Complexity	Supply Chain Complexity	Main Raw Materials	Global Manufacturers and OEMs
 <p>Switches and Dimmers</p>	<p>●</p> <ul style="list-style-type: none"> Moderate production complexity Can be produced in adjacency with light fixtures Complexity is in aesthetic and, in case of smart devices, use of technology, but can be achieved through JVs 	<p>●</p> <ul style="list-style-type: none"> Low supply chain complexity Raw materials available locally Steel can be locally supplied by Emirates Steel Silicon can be easily imported from China 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Copper wires <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Ceramic <input checked="" type="checkbox"/> Plastics <input type="checkbox"/> Silicon for semiconductors¹ (Imports) 	<p>Signify</p> <p>Honeywell</p> <p>ABB</p>
 <p>Fixtures</p>	<p>●</p> <ul style="list-style-type: none"> Low production complexity Uses automated assembly lines and simple machining processes Complexity is in aesthetic: large, custom-designed fixtures may involve intricate metalwork and a high degree of craftsmanship 	<p>●</p> <ul style="list-style-type: none"> Low supply chain complexity Raw materials available locally Steel can be locally supplied by Emirates Steel, aluminium by EGA, and glass by Emirates Float Glass 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Copper wires <input checked="" type="checkbox"/> Aluminium <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Glass <input checked="" type="checkbox"/> Plastics <input checked="" type="checkbox"/> Brass <input type="checkbox"/> Printed Circuit Boards (Imports) 	<p>Signify</p> <p>Acuity Brands. + OSRAM</p> <p>ZUMTOBEL</p> <p>TOPEX</p> <p>EATON</p> <p>FAGERHULT</p>
<p>INCLUDED IN BASE SCENARIO</p> <p>Established Lighting players are expected to manufacture fixtures in-house to support the required scale for this opportunity and meeting buyer expectations</p>				

Note: 1) Silicon for semiconductors has to undergo a highly specialized and refined manufacturing process
Source: Expert interviews, PwC analysis, desktop research

Business Case

Sample Case: Greenfield Project for Medium-Sized Lighting Assembly and Manufacturing Plant

Overview

- Establish a **medium-sized facility** with parallel assembly and production lines for Lighting systems:
 - Covers both the lighting and control elements of the lighting system
 - Serves all customer segments (residential and commercial/industrial)
- Opportunity to **serve the local UAE market, as well as to export to the broader GCC and MENA regions**, with the exception of Saudi Arabia

Business Case Triangulation

Expert input

- Market capture potential
- CAPEX requirements for (i) property, (ii) assembly line, (iii) manufacturing line
- Margins and IRR sanity checking

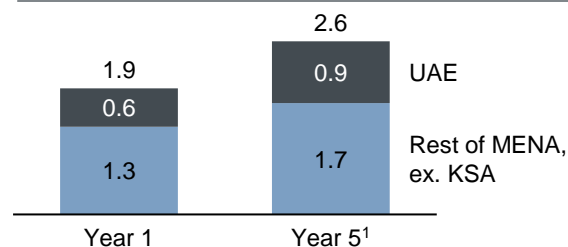
Public comparables

- Companies:** Signify, OSRAM, Zumtobel, Acuity Brands, Fagerhult Group
- Benchmarks:** EBITDA margin, EBIT margin, FCF conversion, Asset Turnover assumptions

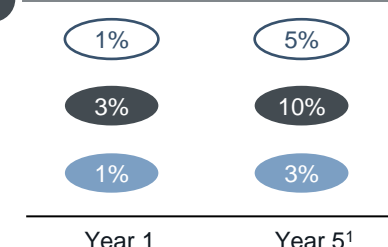
Business Cases

Market Capture

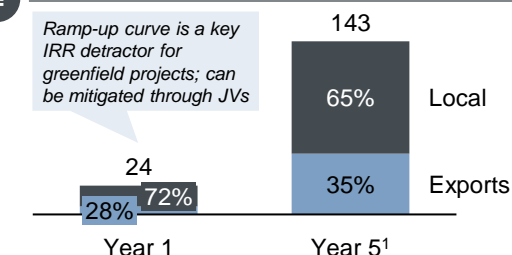
High Potential Segments: Assembled Units Imports for Local Consumption, USD Bn



Share Capture Ramp-up, %



Expected Revenues, USD Mn



Operations

Production Overview

Considerations

Investment Case

CAPEX Requirement

Expected IRR

Payback Period

IRR Upside Potential

Base Scenario: Limited Manufacturing

- Assembly and quality control lines
- Manufacturing of fixtures (casing; ~25% of the value chain)

- + Lower upfront costs (and business risk)
- + More price-efficient
- Higher supply chain risk
- Worse commercial positioning for large buyers

Key Assumptions

- Facility size of ~20,000 m² (~\$13Mn)
- Assembly and manufacturing (~\$45Mn)
- 60% financing of required CAPEX (can go up to 80% with government support)
- EBITDA: ~12%
- Free-Cash-Flow conversion: ~60%
- Assumes FCF ramp-up to stabilization in year
- Assumes equipment cost of replacement as TV

\$65-70Mn

~15%

~7 years

Alternative Scenario: Comprehensive Manufacturing

- Assembly and quality control lines
- Manufacturing of fixtures (casing; ~25% of the value chain)
- Manufacturing of switches and dimmers (~30% of value chain)

- + Better control of supply chain
- + Better commercial positioning with large buyers
- Higher upfront risk
- More expensive to produce high-value add parts inhouse

Key Assumptions

- Facility size of ~22,000 m² (~\$15Mn)
- Assembly and manufacturing (~\$78Mn)
- 60% financing of required CAPEX (can go up to 80% with government support)
- EBITDA: ~10% (in-house production of switches and dimmers more expensive than imports)
- Free-Cash-Flow conversion: ~60%
- Assumes FCF ramp-up to stabilization in year
- Assumes equipment cost of replacement as TV

\$100-105n

~9%

~11 years

- Brownfield / synergistic project (e.g., JV with local supplier; capacity expansion)
- Increasing financing up to 80% (with government support)
- Faster market capture
- Additional revenue from services / aftersales

Thank you

