



Empowered lives.
Resilient nations.



Amman

Sustainable Urbanization and Resource Efficiency



Agenda

1

**Development
changes**

2

**Regulatory
Reforms**

3

**GAM's
Achievements**

4

**GAM's
Approach**

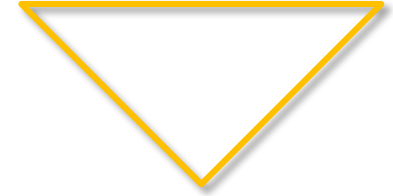
5

SURE_UNDP_GEF

Development Challenges(2008, ...,2011,..., 2018)

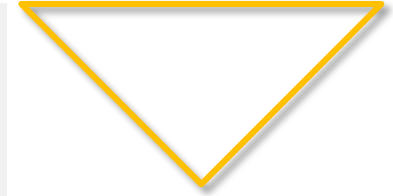
- Population growth.
- Successive influxes of refugees (2011)
- Jordan imports 96% of its oil and gas
- Water insecurity.

Year	2007		2010		2012		2014		2015		Compound Annual Growth Rate, CAGR (%)
Units	GWh	%	GWh	%	GWh	%	GWh	%	GWh	%	
Household	4,017	38	5,219	41	6,126	43	6,580	43	6,938	43	7.07
Industrial	2,918	28	3,258	25	3,461	24	3,877	25	4,012	25	4.06
Commercial	1,757	17	2,184	17	2,427	17	2,358	15	2,460	15	4.30
Water pumping	1,592	15	1,867	15	1,955	14	2,287	15	2,426	15	5.41
Street lighting	269	2	315	2	305	2	316	2	337	2	2.86
Total	10,553	100	12,843	100	14,274	100	15,418	100	16,173	100	5.48



Regulatory Reforms for climate change

- ***the Renewable Energy and Energy Efficiency Law No (13).***
- ***National Green Growth Plan 2016***
- ***Jordan's National Energy Efficiency Action Plan (NEEAP2)
(15% reduction target across all sectors)***
- ***establishes the (JREEEF) under the umbrella of (MEMR)***
- ***By-law No (73) on Regulating Procedures and Means of
Conserving Energy and Improving Its Efficiency***
- ***Jordan's Nationally Determined Contribution(NDC)
(1.5% GHG Reduction by 2030 & 12.5% upon availability
of International climate finance)***



Amman's 2025 Vision and Aspiration | In Action

Amman: A Green, Sustainable City

An Efficient , heritage and multicultural City

Amman's Vision



GAM's Achievements- Mitigation plan

Renewable Energy And Green Building

**Develop
Jordanian Green
Building Guide_
Not Mandatory**

**Delivering
Incentives for
Green Buildings
*Like: Density
Bonus, Extra
Floor***

**Awareness
Campaigns**

GAM's Achievements- Mitigation plan

Transportation And Waste

**Licensing
Electric Car as
Taxi, and
charging
Stations**

**Bus Rapid Transit
(BRT), public
Transportation**

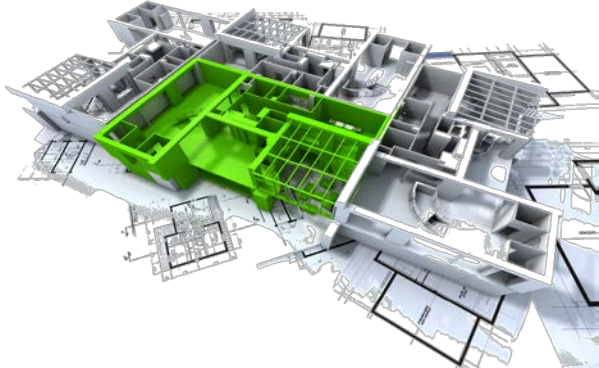
**Bio Gas Project
Waste to Energy
Solar PV 80 MW**

**Replace Street
Lights from high
pressure sodium
to LED**

FOR ANY GREEN BUILDING PROJECT Comply with Jordan Green Building Guide



Density Bonus : Additional Percentage to original Floor Area Ratio (FAR)

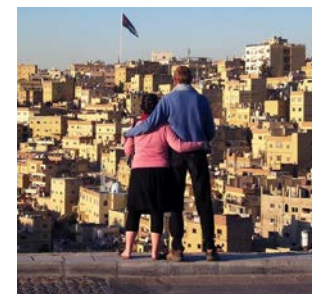
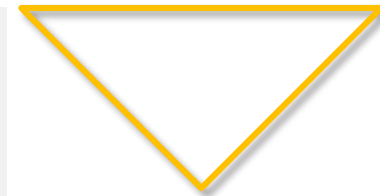


Objective:

Compensate the owner from Extra capital cost from the implementation of Green Building

Barriers

- Barrier #1: Lack of assessment tools for optimized climate-resilient**
- Barrier #2: Lack of tools for enforcing and enhancing regulatory frameworks for EE in the GAM**
- Barrier #3: Information/Awareness**
- Barrier #4: Technical capacity barriers and absence of performance-based GHG monitoring frameworks**
- Barrier #5: Lack of fiscal incentives**



What Is SURE:



A Systematic Approach to Sustainable Urbanization and Resource Efficient for City of Amman



Financing: \$2.64 million GEF grant and ~\$22 million of co-financing (from GAM, government institutions, private sector, CSOs and UNDP)



Project Duration = 60 months.

Executing Agency: UNDP CO- Jordan

Implementer Partner: Greater Amman Municipality (GAM)

Key Stakeholders: MoPIC, MEMR, MOEnv., JNBC, JSMO, NERC, JGBC, EU, USAID, GIZ, ESCOs and private Sector.

Project Components

Urban sustainability planning tools and benchmarks

Strengthened GAM enabling framework for low-carbon buildings and street lighting

Performance-based GHG monitoring frameworks for low-carbon building and street lights.

Targeted proof-of-concept mitigation interventions



COMPONENT 1: Urban sustainability planning tools and benchmarks

Review and Update Amman Master Plan

**Sustainability Plan (SP) and Financing Strategy (FS)
for GAM (USF methodology)**

**Quantification of all energy, water and material
flows in the GAM**

**Strengthening data analysis and reporting
(Amman Urban Observatory)**

Awareness programme for Sustainability Plan

COMPONENT 2: Enabling framework for low-carbon buildings strengthened

Energy Unit for Technical Inspections

Institutional strengthening of Energy Unit

Update Energy Codes and develop 'Retrofit Building Guidelines'

Develop accreditation programme for ESCOs

Accredit and capacitate ESCOs

Online tool for comparative socio-economic and environmental analysis of buildings using LCA

Energy rating and labeling scheme for buildings

COMPONENT 3: Performance-based GHG monitoring framework established

MRV system for Building Energy Codes

Develop a city-wide sectoral NAMA

Assistance to the JREEEF to provide customized financial incentives to promote investments in Building Energy Codes

Identification and quantification of the effectiveness of different policy and financial DE risking instruments for EE buildings using UNDP's DE risking methodology (DEEI)

Dissemination of lessons learned

COMPONENT 4: targeted proof-of-concept mitigation interventions

2 new private-sector residential buildings adopting resources efficiency interventions

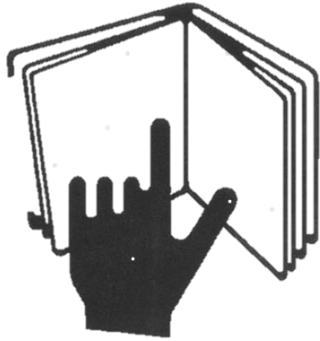
2 existing public-sector buildings integrating best practice resource efficient/technology measures

Updated EE Lighting Code and smart usage system in place for all GAM lights

Our Approach



Awareness



Regulation



Capacity



Partnerships



Incentives

Lessons Learnt

Experiences and Best Practices Related to the Project are Compiled and Disseminated in other Cities of Jordan



RE's & EE



Water



Waste



Green Buildings



Thank You