

Amman Solid Waste and Carbon Finance Project (EBRD)

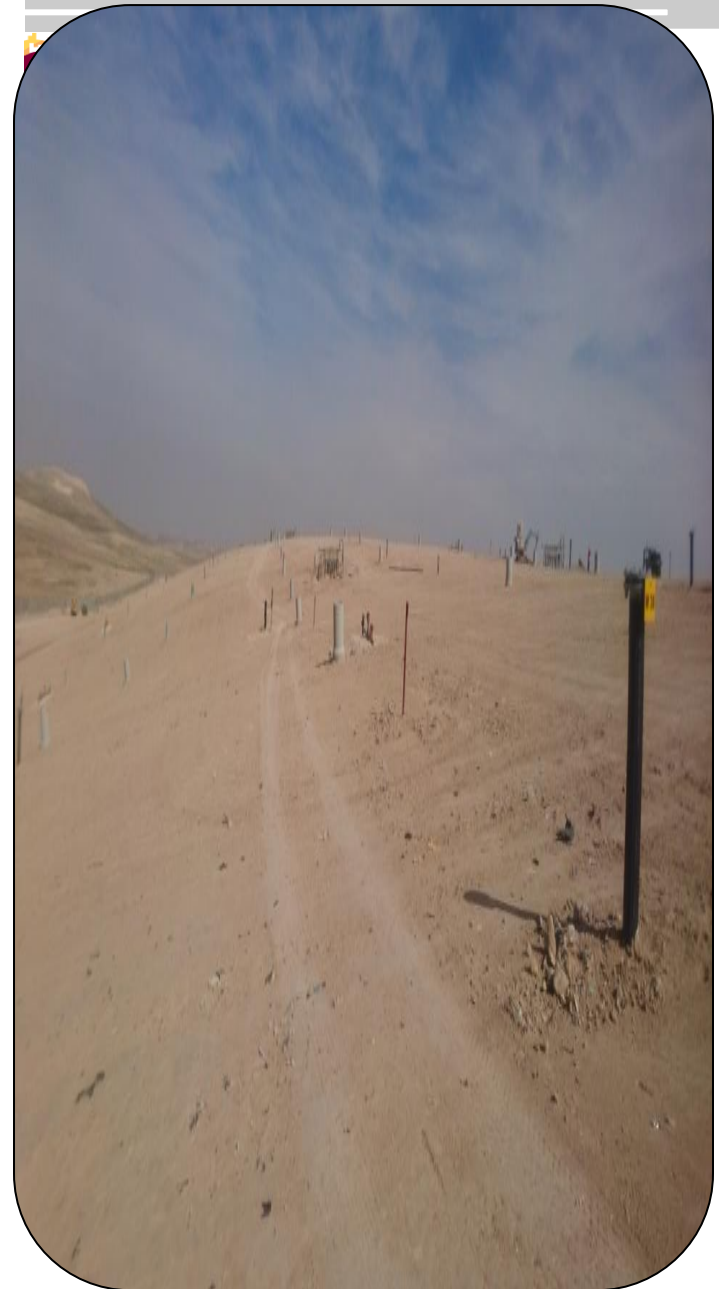
Specific Investment Loan of Euro 18,000,000

Total cost : Euro 40,000,000

Specific Objectives

✓Environmentally upgrade and expand the existing municipal solid waste landfill to meet the city's disposal needs ,and generate electricity while mitigating Green House Gases emissions

✓Improve the cost effectiveness of the existing municipal solid waste collection and transport system and improve overall cost recovery.





Phase 1

- Cell2 will be covered by compacted soil and gravel
- 157 wells to be excavated in cell 2
- The network of pipes will be installed
- GCL cover





Phase 2

- Cell1 and 3 will be covered by compacted soil and gravel
- 300 wells to be excavated in cell 1 and 3
- The network of pipes will be installed
- GCL cover
- Installed Flare





Manifold with gas pipe connection and numbers



Landfill cover and gas wellheads protected by concrete rings





Phase 3

Under working (Install three engines to production electricity

Estimated : 5 MW/h



Pilot project between GAM and GIZ

Sorting from the source

Contributions to the Project by the
Government of the Federal Republic of
Germany via GIZ





In accordance with the agreed Minutes of Meetings of Governmental Talks on Development Cooperation dated September 27/28 2016 and the Agreement on Technical Cooperation 2016 dated July 5 2017 the Government of the Federal Republic of Germany shall provide GIZ with up to EUR 4.000.000 (in words four million Euros) for the German contribution. This amount shall include the costs incurred by German

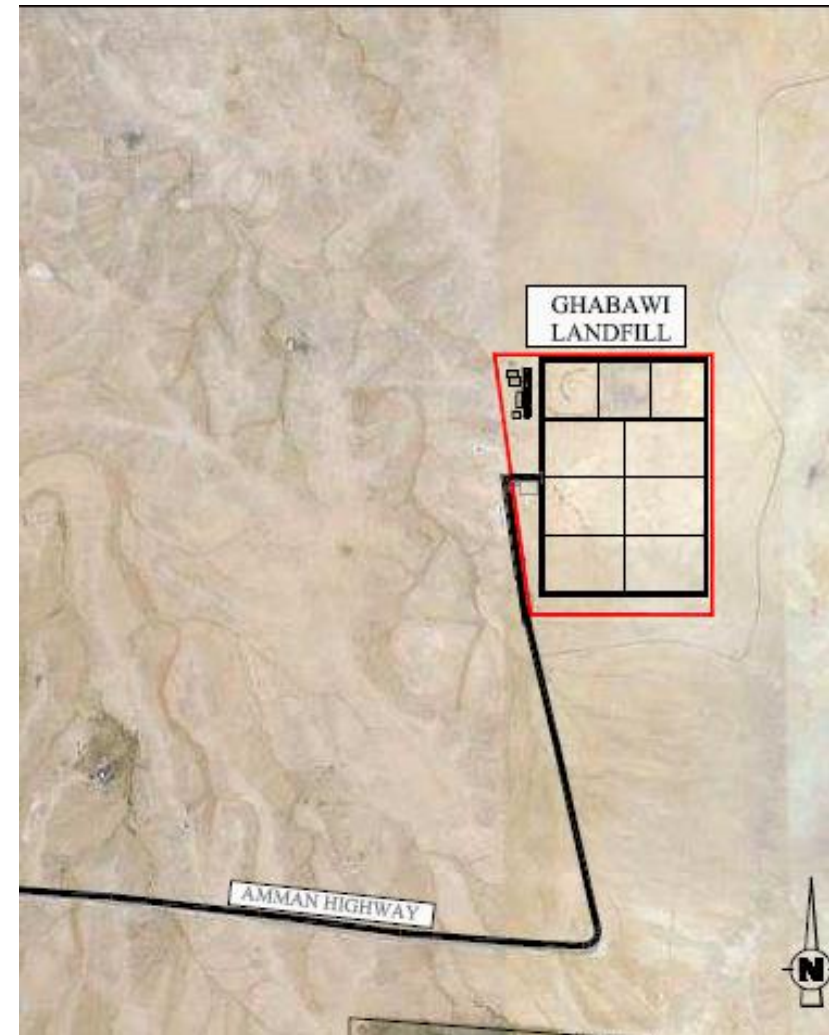


Thank You



Sanitary Landfill

- Site selection and suitability confirmation as per international standards
- 2000 donums (2km²)
- Excavated Cell type of landfill
- 9 cells with potential service time beyond 2030
- Liner system = GCL, HDPE geomembrane, and protection geotextile
- Leachate collection system = gravel, HDPE slotted pipes, and filtration geotextile
- Leachate treatment line = aeration, sedimentation, and filtration
- Advanced leachate treatment and landfill gas extraction and utilization (World Bank)



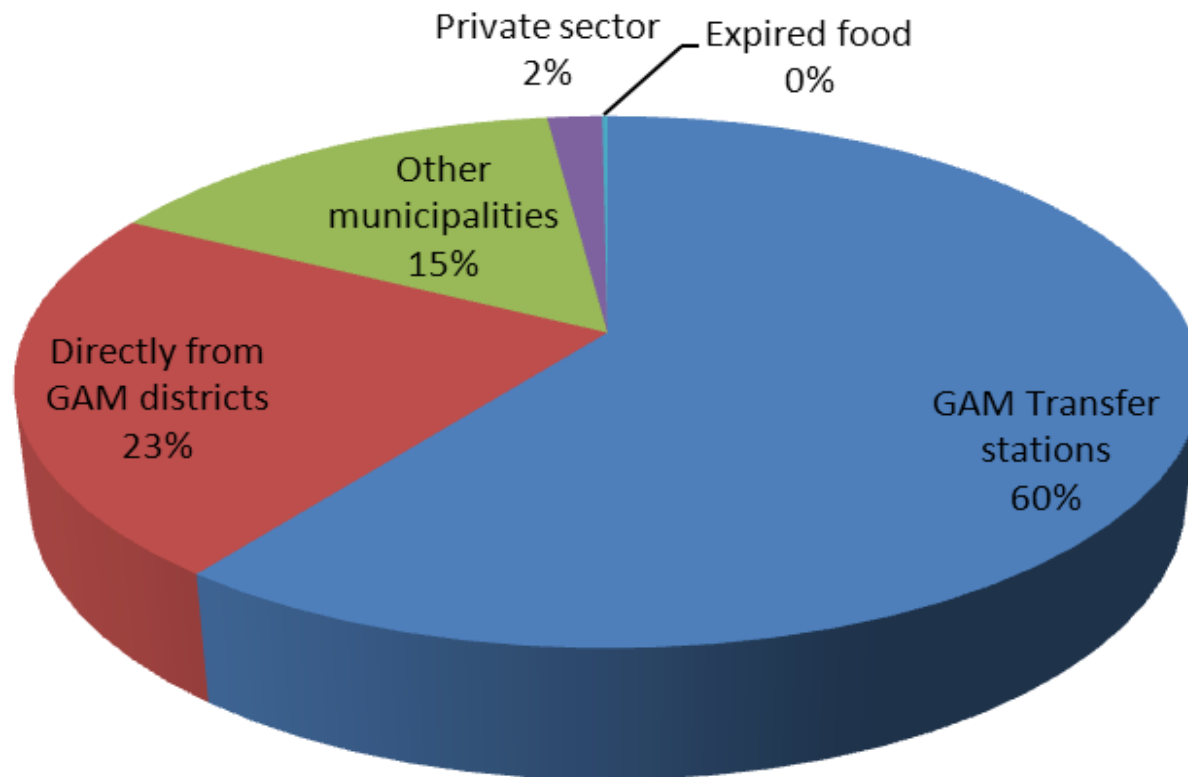


WASTE QUANTITIES RECEIVED IN AL GHABAWI Landfill

Total	Tadweer Company	Expired food	Rusifeh	Zarqa	Privet sector	Naour	Mowagar	Sahab	GAM district	Transfer station	Date	
109819	532	774	8929	13085	2569	1120	1085	0	139	81215	1/2017	1
99569	712	207	7815	12386	2589	1022	1079	0	118	73270	2/2017	2
115234	1274	424	10271	13405	3089	1132	1102	0	256	83892	3/2017	3
111312	424	261	8584	12113	3033	363	994	1107	271	83710	4/2017	4
125299	745	189	9676	16313	3018	0	1110	680	146	92937	5/2017	5
136646	461	38	12864	21826	2086	0	1186	4	206	97552	6/2017	6
130205	698	148	11706	17203	2791	0	1076	17	147	95931	7/2017	7
125511	596	222	10147	13729	2637	0	1139	760	140	95819	8/2017	8
117580	1484	144	10615	13933	2320	0	1077	1938	496	85230	9/2017	9
115939	2377	322	9291	13375	2452	0	1046	10	142	86559	10/2017	10
110289	1955	240	10910	11142	1840	0	939	0	80	82832	11/2017	11
116512	3426	200	9448	15051	2263	0	895	0	60	84820	12/2018	12
1413915	14684	3169	120256	173561	30687	3637	12728	4516	2201	1043767	Total/ ton	
119019	770	267	10067	14888	2681	404	1094	501	213	87728	Avg. monthly / ton	
3873.7	40.2	8.7	329.5	475.5	84.1	10.0	34.9	12.4	6.0	2859.6	Avg.day/ton	
	1.04%	0.22%	8.51%	12.28%	2.17%	0.26%	0.90%	0.32%	0.16%	73.82%	%	



Origin of incoming waste in Ghabawi Landfill (2)





Cost of the services

- The total costs associated with solid waste management in the Amman Municipality (operating and capital costs) amounted to about (52) million dinars in 2016 and is expected to increase by 5% annually.
- The cost recovery rate for 2016 is about 56% with a total value of about 27.5 million dinars.



Public awareness programs



أمانة
عمان الكبرى
عمان بيتنا



توقيتك صح!!

من الساعة 6:00 صباحاً
إلى الساعة 10:00 صباحاً

عمان مدينتك.. بيتها بينتك..

عمان بيتنا



أمانة
عمان الكبرى
عمان بيتنا



**خلينا نحافظ على نظافة مدينتنا
عمان بيتنا**



نحسب إلقاء أي مواد أو فضلات من بواحد المركبات حسب لا يترتب عليها غرامة عالية
مقدرتها 20 دينار حسب نصوص المادة 37 بند 12 من قانون المرور رقم 9 لعام 2008.



Photos 76 and 77: Tadweer sorting plant seen from the road to Ghabawi (right) and from the roof of administrative building in Ghabawi landfill (down)





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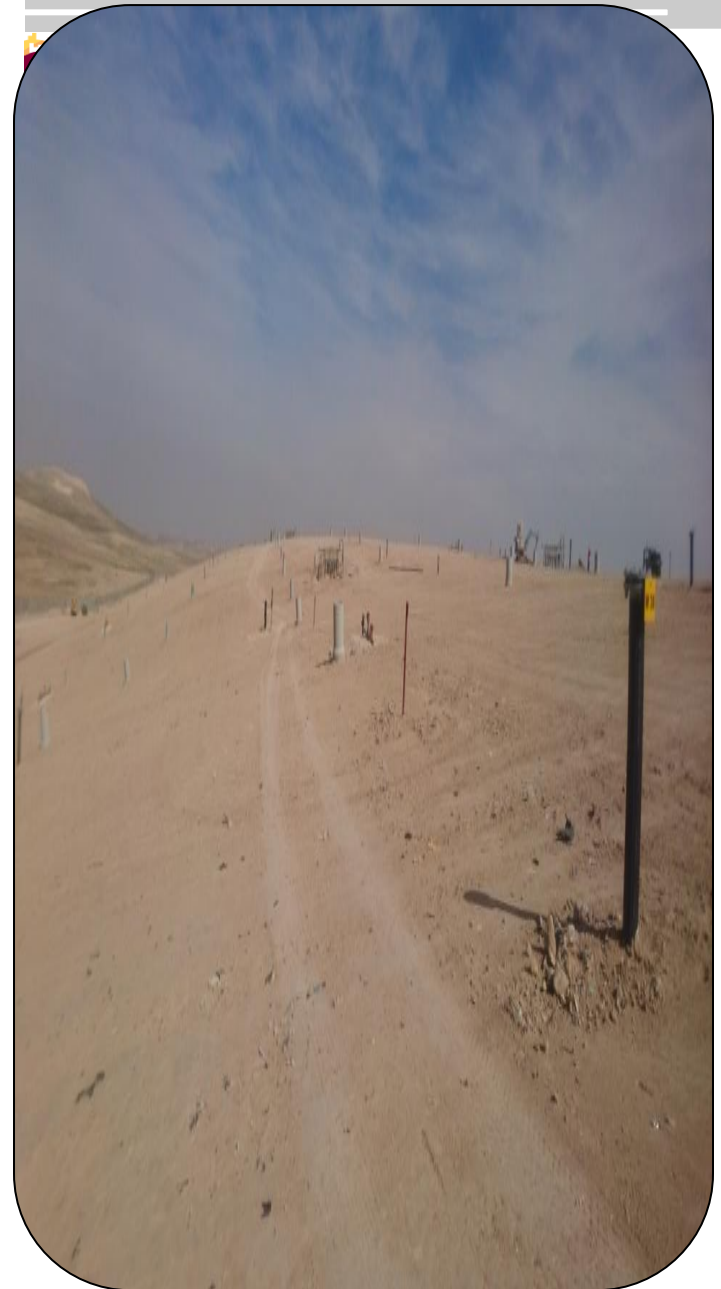
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