

H2020 Review and Monitoring (RM) workshop on Assessment
10th meeting of the Horizon 2020 Review and Monitoring (RM) Group
23-24 September 2019 in Athens, Greece

Country presentation Jordan



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European Environment Agency

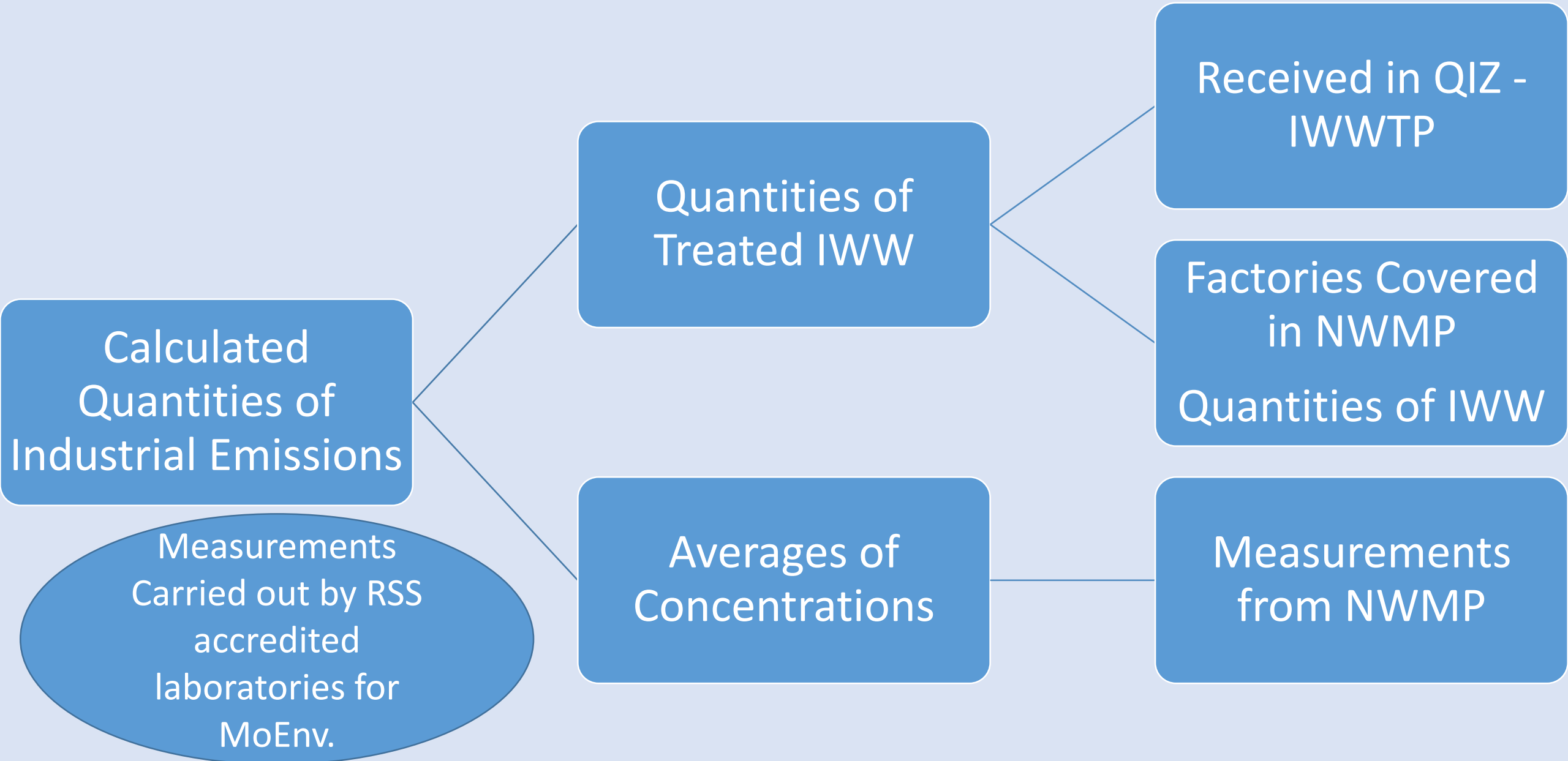


Overall national Key Messages

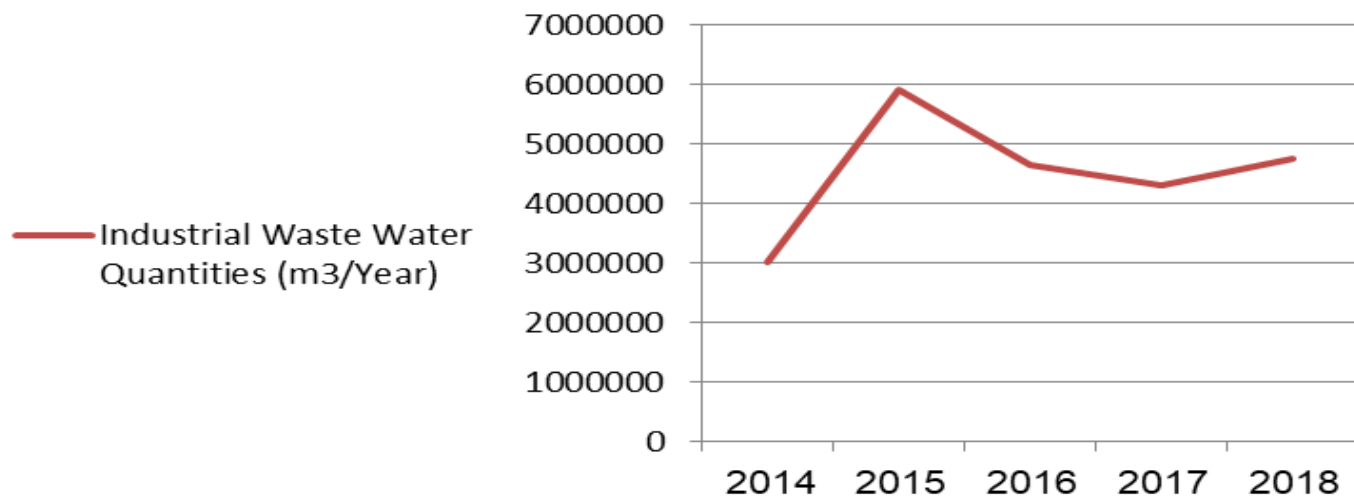


M.O.Environment Strategy	Statistics Strategy	Other Data Sources	On-going Information Systems Projects
<ul style="list-style-type: none">- To prevent and reduce the negative impacts on the environment caused by pollution & climate change- Programmes	<ul style="list-style-type: none">- Environmental Statistical Strategy- Creation of Environmental Statistics Unit within MOEnv.- Capacity Building- Infrastructure	<ul style="list-style-type: none">- Department of Statistics- Ministry of Water and Irrigation/ Laboratories- Ministry of Health/ Laboratories- Ministry of Municipalities	<ul style="list-style-type: none">- National Monitoring and Information System for Solid Waste/ HW.- National Water Information System. <p data-bbox="1689 835 2540 978">Needed Information Systems</p> <ul style="list-style-type: none">- Information System for Industrial Emissions

Methodology



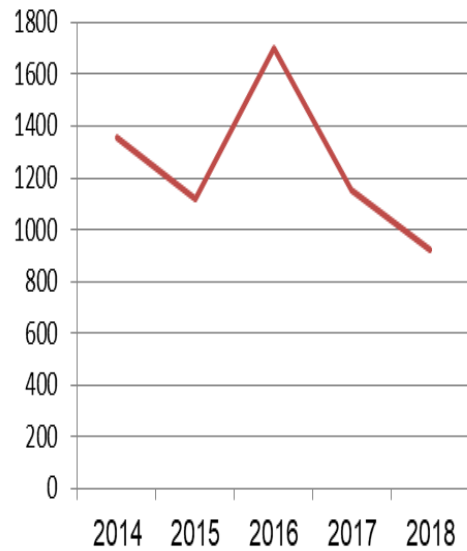
Industrial Waste Water Quantities (m³/Year)



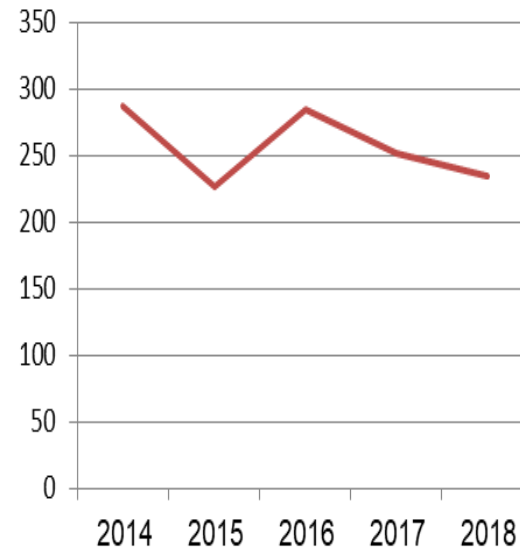
Year	Quantity (m ³ /year)
2014	3009267
2015	5910720
2016	4649800
2017	4299400
2018	4749445

- Decrease in Industrial Activities and Change of some Activities.
- NWMP- cover only 40 industrial Activities Yearly
- List of factories in which industrial wastewater is monitored are replaced by new ones that do not exceed the permissible limits in the Jordanian standard.

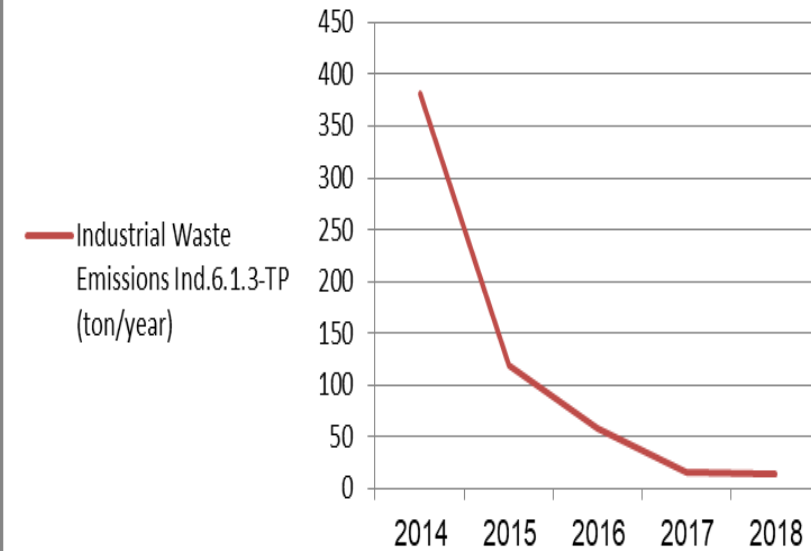
**Industrial Emissions. IND:6.1-BOD
(ton/Year)**



**Industrial Emissions. IND: 6.2- TN
(tone/year)**



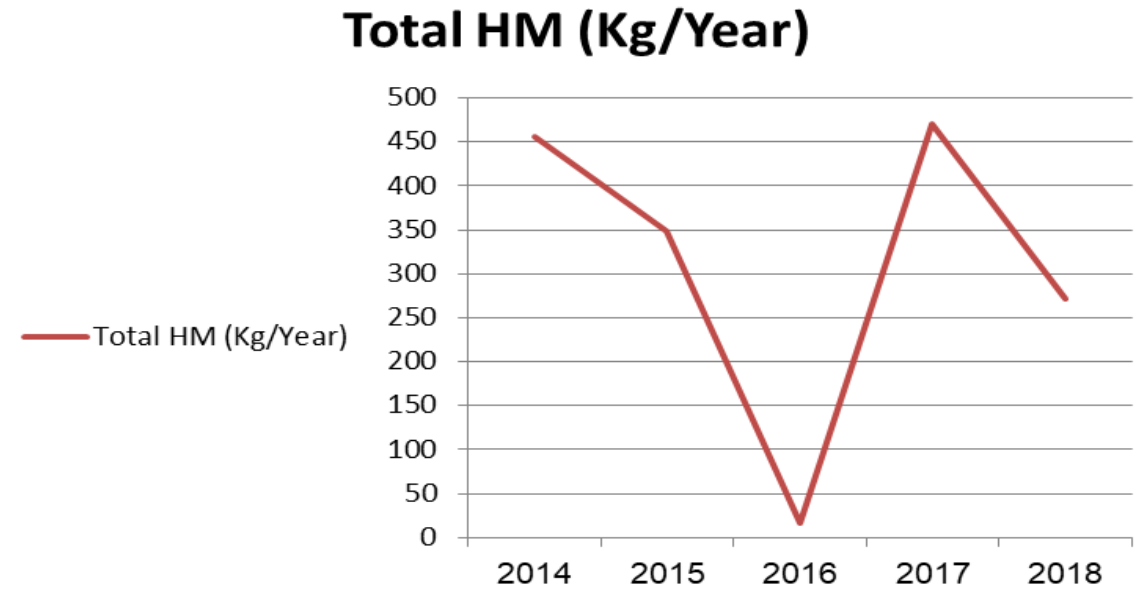
**Industrial Waste Emissions Ind.6.1.3-
TP (ton/year)**



- All the graphs show the depth of the industrial recession in Jordan resulting from Conflicts in the Regional that led to the closure of markets for these industries.
- A large number of factories in some sectors are completely stopped
- The process of replacing factories in the list of monitored facilities

6.2.1 -Total heavy metals load released from industrial installations

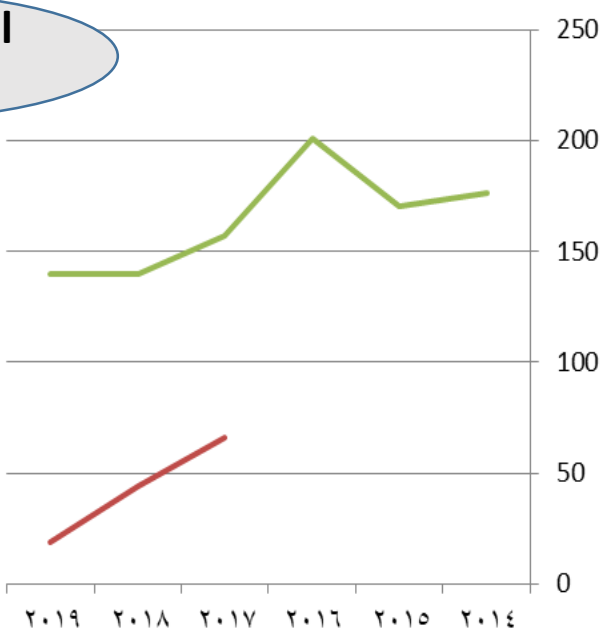
Year	Hg	Cd	Pb	Zn	Cu	Cr	Total HM (Kg/Year)
2014	NM	0	93.075	313.573	49.275	0	455.923
2015	NM	0	0	194.801	21.9	131.4	348.101
2016	NM	0	0	16.644	0	0	16.644
2017	NM	0	0	386.9	54.75	29.2	470.85
2018	NM	0	0	272.144	0	0	272.144



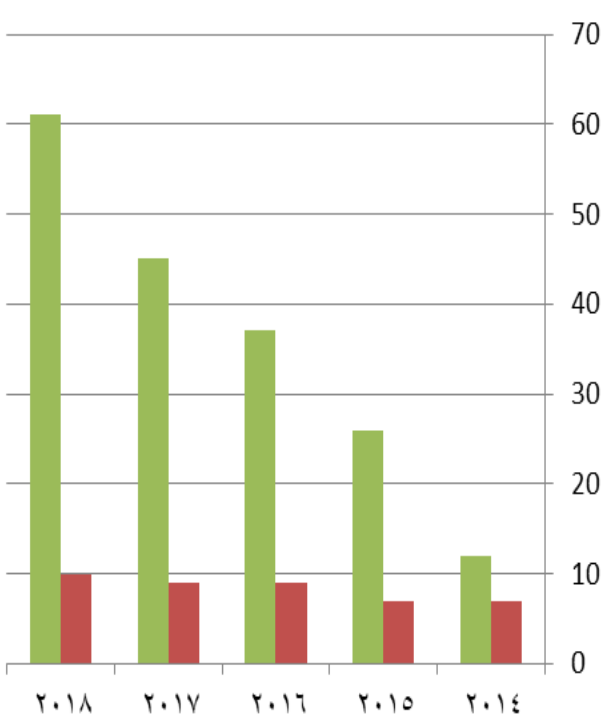
- **All the Measurements with zero Value are under the Detection Limits of the Instruments.**
- **The Values reflect the problem of industrial recession.**

Environmental Inspections

— Number of environmental inspections in breach of laws and regulations
— Total number of environmental inspections



■ Number of reporting industrial installations
■ Total number of industrial installations required to report



Challenges & Difficulties

- **Lack of Budget to cover monitoring of all Industrial Plants.**
- **Focus on Large and medium-sized industrial facilities.**
- **Weak communication between regulatory bodies and industrials**
- **Low level of reporting from industrial activities**
- **Lack of national reporting system from industries**

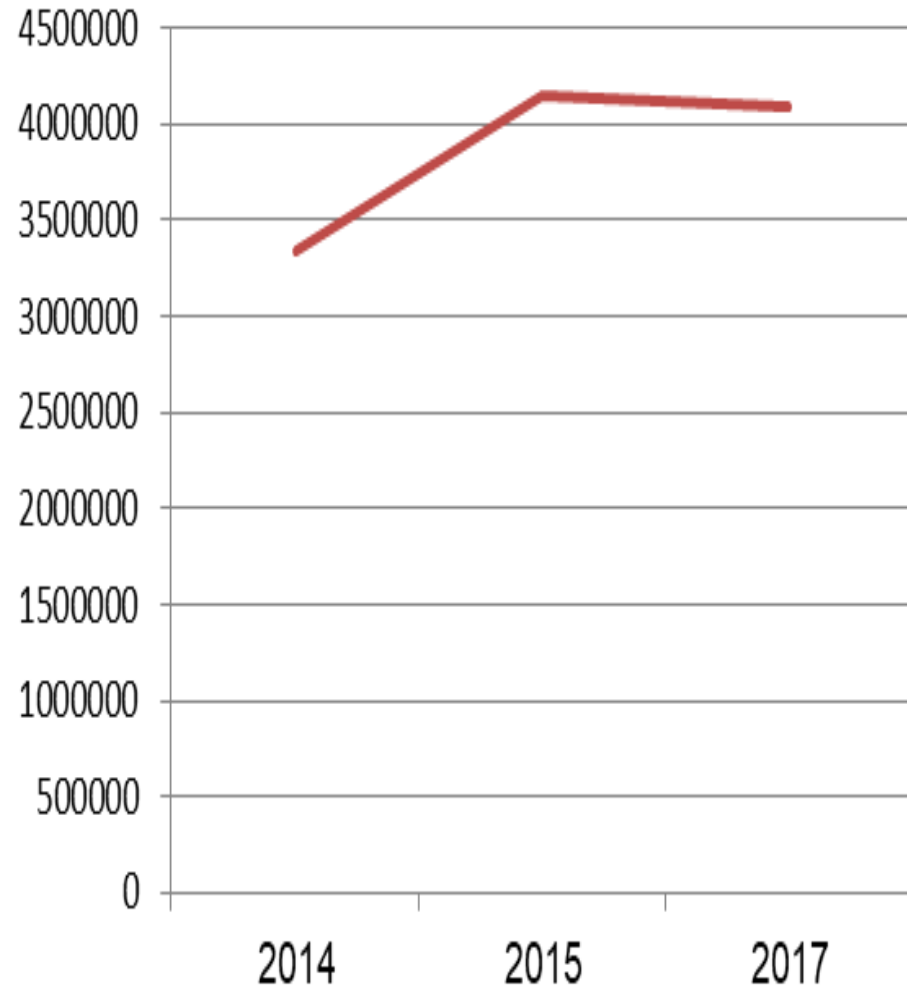


Water

- Decentralized Wastewater Treatment Plants up to 5000 PE
- The National Framework for Decentralized Wastewater Management in Jordan has been developed including Monitoring, Standards, Operation, Maintenance and Responsibilities
- Certification of prefabricated wastewater treatment plants up to 500 PE
- The domestic wastewater treatment plants have been upgraded in terms of the techniques used, since the use of natural treatment plants has been completely discontinued
- *Data are available but collection is ongoing (requested and sent)*

Waste

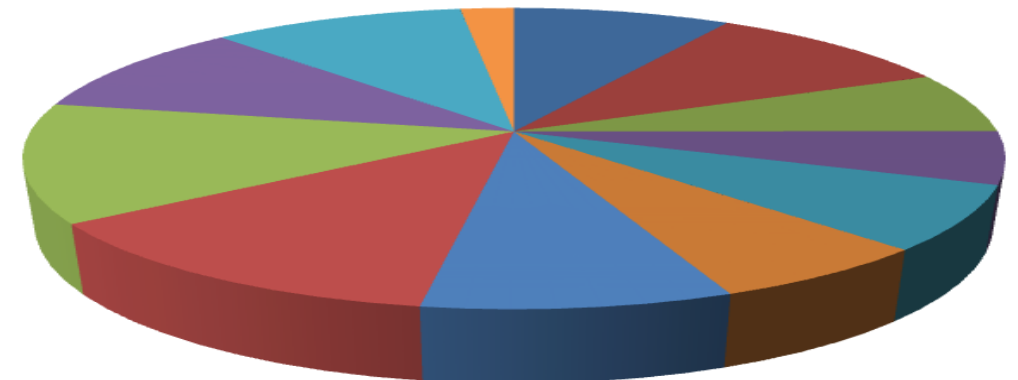
Total MW



Governerate	2014	2015	Average
Amman	0.05	0.07	0.06
Balqa	0.07	0.07	0.07
Zarqa	0.05	0.05	0.05
Madaba	0.01	0.07	0.04
Irbid	0.05	0.05	0.05
Mafrq	0.05	0.04	0.045
Jarash	0.07	0.52	0.061
Ajlun	0.09	0.09	0.09
Karak	0.08	0.10	0.09
Tafilah	0.08	0.06	0.07
Ma`an	0.07	0.07	0.07
Aqaba	0.01	0.01	0.01

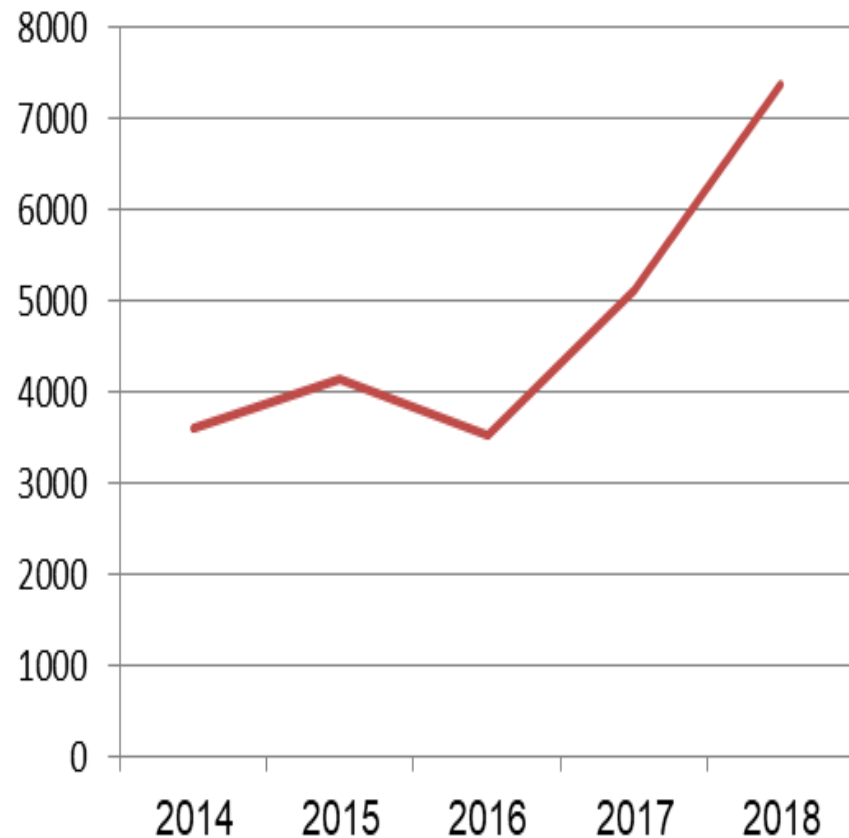
Average of Plastic Waste Generation per Capita for the years, 2014, 2015/Jordan Certified Waste Management Guide 2016

- Amman
- Balqa
- Zarqa
- Madaba
- Irbid
- Mafrq
- Jarash
- Ajlun
- Karak



HAZARDOUS WASTE

HW-Quantities



Year	Exported HW.Q	Stockpiled HW.Q	Disposed HW.Q
2014	0	2297.4	1300
2015	0	3830.6	1300
2016	1100	1118.8	1300
2017	2113.6	1700	1300
2018	3113.6	2728.6	1545

Waste Management

- *New strategy for municipal solid waste management for the period 2017-2030*
- *Support received from EU to implement the strategy*
- *Real time monitoring of waste quantities through Wellbridge from landfills to the national monitoring information system at the MoENV*
- *40 Indicators are setup within the project where all SEIS indicators are covered for waste*



SSFA – Support

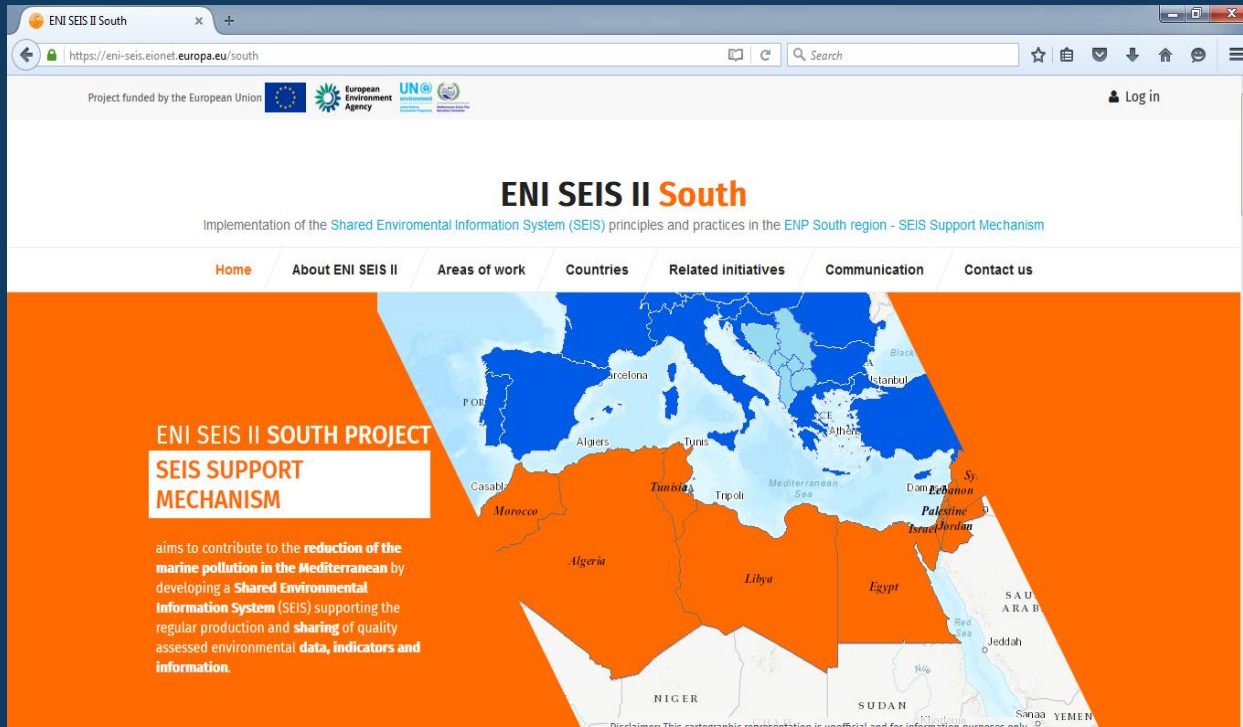
- **National consultant:**

- All procedures of hiring the national consultant finished
- The national consultant selected and contract is in process of signature
- The national consultant will contribute to complement data gathering and analysis
- Data checks

- **Regional expert:**

- Clarification of methodologies and indicators
- Support, coordination and guidelines for data collection
- Assessment of Jordan situation in Industrial emissions
- Recommendations for calculation methodologies
- Assessment of the environmental survey on industry questionnaire and results
- Need for support to improve the template and data analysis
- Need for further support to select and use appropriate Emission Factors for IE

Thank you for your attention!



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