



# National Monitoring Information System for Waste

**Waste Management strategy  
link with SDG / National Monitoring  
Information system**



# VISION IN THE PAST

Jordan recognized Municipal Solid Waste as pressing issue that needs immediate action  
Action laid in the National agenda for sustainable development 2006-2015

- ✓ Development of MSWM policies;
- ✓ Encouragement of reduction of generated MSW quantities
- ✓ Maximization of the MSW collection coverage;
- ✓ Encouragement of MSW reuse and recycling; and
- ✓ Promotion of environmentally sound treatment and disposal



# PRESENT VISION

The government of Jordan approved its first national solid waste management strategy in 2015.

Shift from old system towards a modern and integrated one that will be based on the **“Three R's**

- **Reduce**
- **Reuse**
- **Recycle**



# GOALS AND TARGETS AND LINK WITH SDG

| Goals  | Targets  | Link with SDG's   |
|--|--|---|
| <p><i>Goal A – Promote waste minimisation, reuse, recycling and recovery</i></p> | <ul style="list-style-type: none"><li>• <i>Waste reduction targets</i> – Reduction of biowaste ending-up to Landfills 75% by weight by 2024 (according to 2014 amounts)</li><li>• Preparing for re-use and recycling of MSW materials (at least paper, metal, plastic and glass) 50% by weight by 2024,</li><li>• Recovery of packaging waste (including reuse, materials' recovery and energy recovery) 25% by weight by 2024,</li></ul> <p>Recycling of packaging waste 15% by weight by 2024,</p> | <ul style="list-style-type: none"><li>• <i>SDG9: Industry, Innovation and Infrastructure</i></li><li>• <i>SDG12: Responsible Consumption and Production</i></li></ul> |



# GOALS AND TARGETS LINK TO SDG

| Goals  | Targets   | Objectives  |
|--|---|---|
| <ul style="list-style-type: none"><li>• Goal B – ensure the effective and efficient delivery of waste services</li></ul> | <ul style="list-style-type: none"><li>• Achieved Coverage of MSW street-cleaning and collection services 100% by 2019, 100% by 2024 and 100% by 2034</li><li>• Closed open dumping and unlicensed disposal sites operate well-functioning sanitary landfills-operation permits 50% by 2019 and 100% by 2024</li><li>• Separate waste collection system and treatment for recyclables (at least paper, metal, plastic and glass) by 2024</li></ul> | <ul style="list-style-type: none"><li>• <i>SDG3: Good Health and Well Being</i></li><li>• <i>SDG11: Sustainable Cities and Communities</i></li><li>• <i>SDG12: Responsible Consumption and Production</i></li></ul> |



# IMPORTANCE OF THE NMISW

- ✓ Collect accurate data and in periodic manner.
- ✓ Important for strategic planning and setting goals and for monitoring the progress.
- ✓ Important data for decision making
- ✓ Monitoring environmental impacts specially of landfills.
- ✓ For the private sector they need to have the data to plan the business model the more accurate the data the better.
- ✓ Monitor the targets set in the national solid waste management Strategy
  
- ✓ Create times series and see the trends
  
- ✓ To control pollution associated with waste disposal



# COMPONENT OVERVIEW

## COMPONENT 1



Strengthen the capacities of MoENV/Stakeholders to establish a NMIS-MSW that will support MoENV to fulfill its monitoring role, also in relation to the EU budget support requirements

## COMPONENT 2



Strengthen the capacities (including equipment) of the MoENV to perform environmental controls on existing and new landfills.

## COMPONENT 3



Strengthen the capacities of MoENV to enhance the regulatory framework as required by NSWM strategy

# Component 1 – establishment of the NMISW



Definition of the content of the NMISW

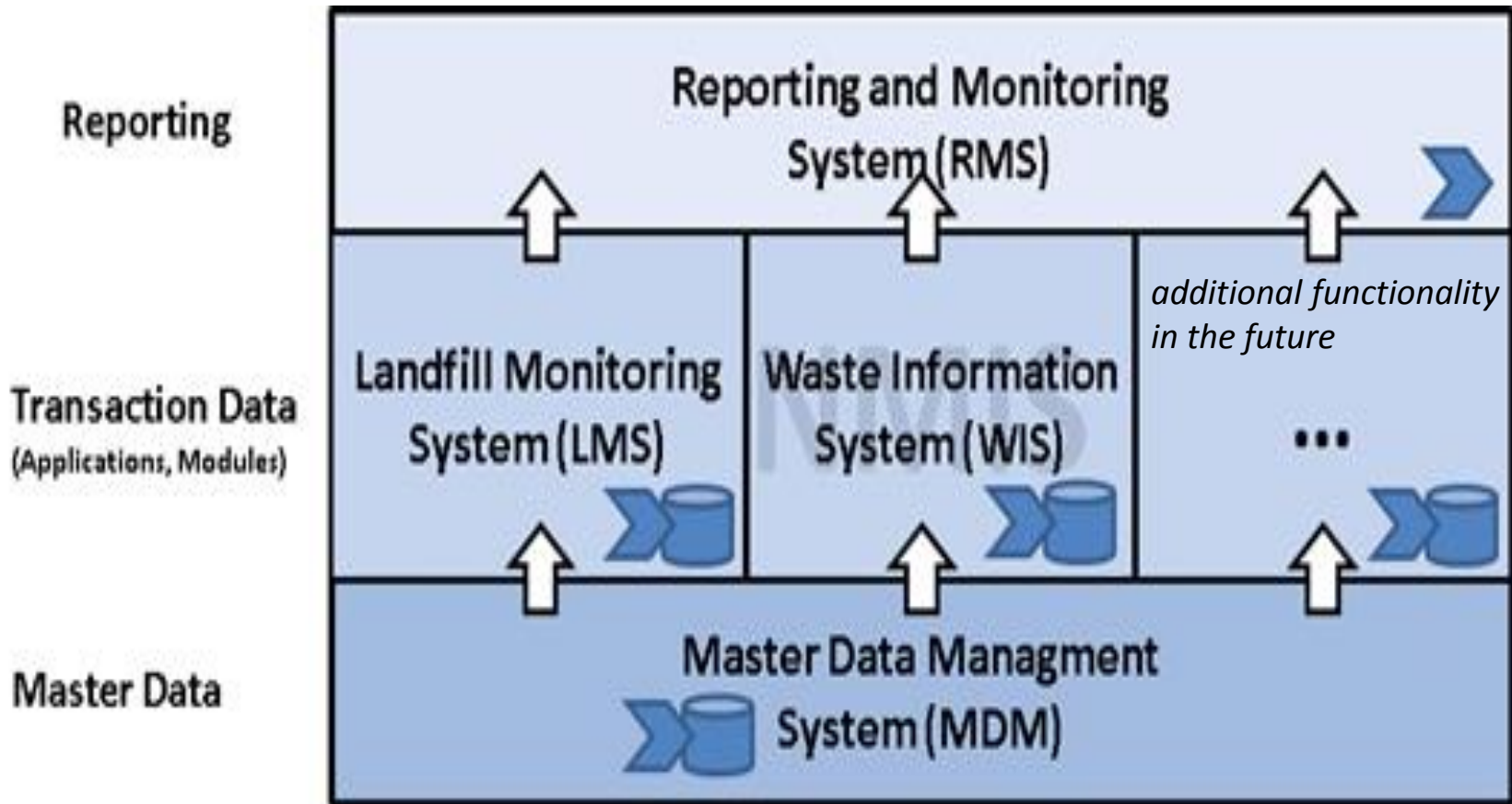
- ✓ How can the NMISW contribute to monitoring the achievement of targets laid down in strategic documents?
- ✓ How can the NMISW contribute to monitoring the enforcement of relevant provisions of legislation?
- ✓ How can the NMISW contribute to fulfilling Jordan's reporting (self-) obligations towards European and/or International Organizations?
- Environmental and key performance indicators

Infrastructure: building the governmental IT tool

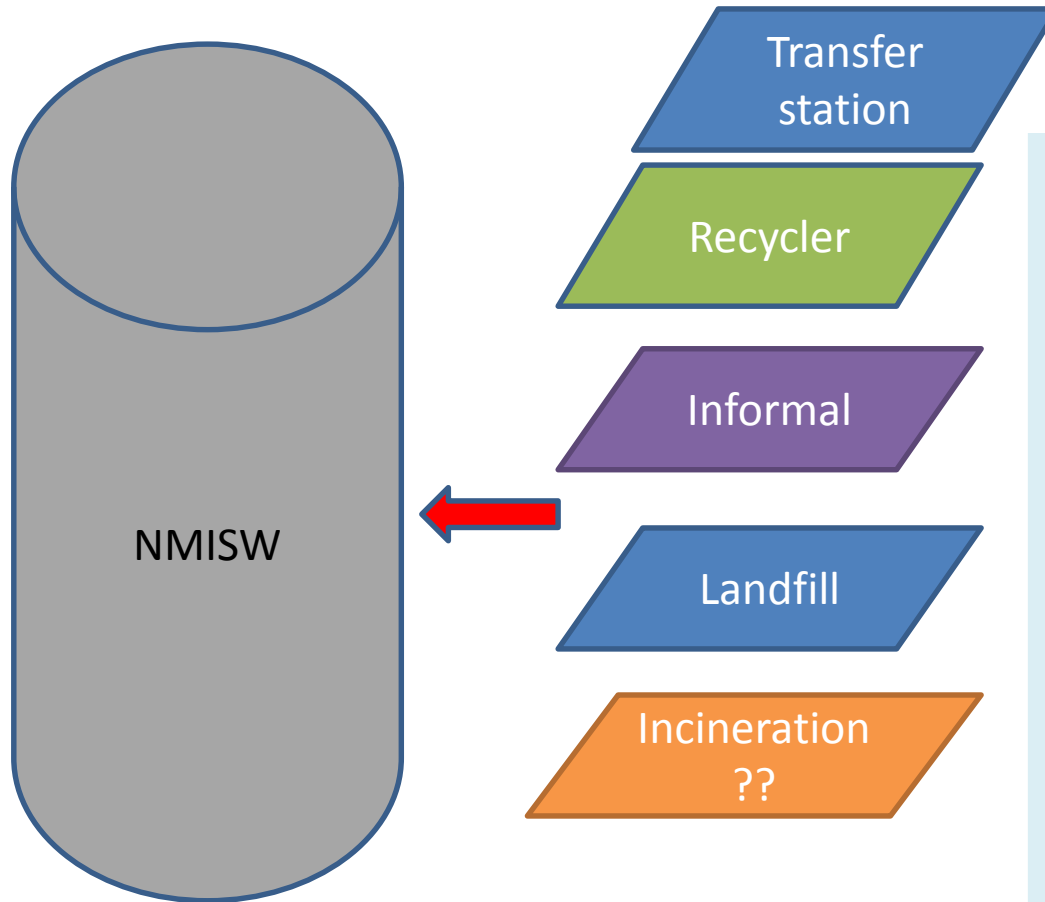
Inter-institutional Cooperation



# Big Picture – Software-Module



# WASTE INFORMATION SYSTEM (WIS)



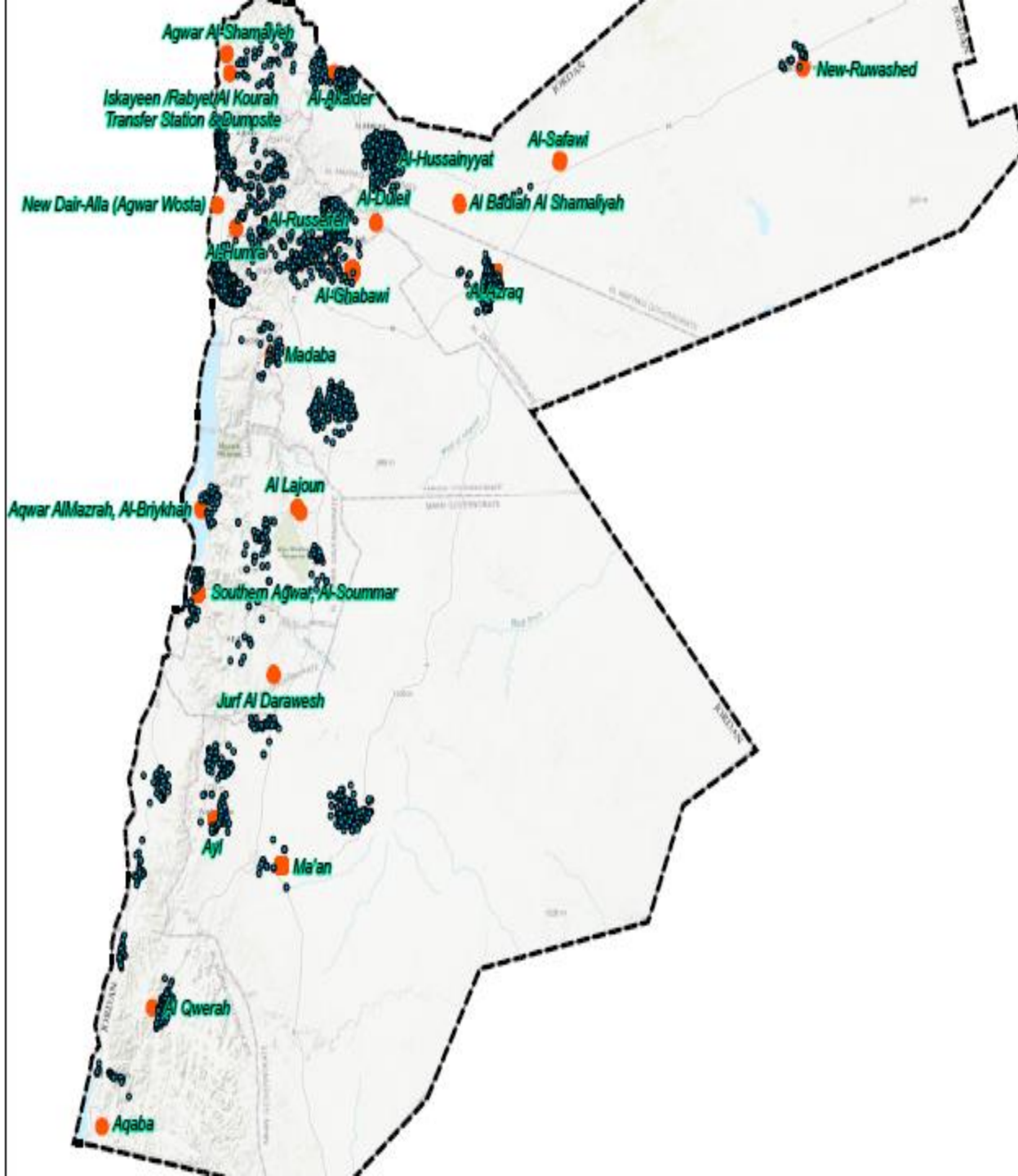
## Reports

- Landfill report
- Incineration Plant report
- Transfer Station report
- Waste Generator report
- Recycler report
- Etc..

## Component 2 - perform environmental controls



- Identification of landfills (adequate infrastructure in view of RTMS), identification of groundwater wells
- Support for establishing the LFMU
- Delivery of equipment (Manual and Real time monitoring)
- Draft guidelines and monitoring program and trainings





|                     | Monitoring | Monitoring | Monitoring | Transfer System |
|---------------------|------------|------------|------------|-----------------|
| <b>Al Ghabawi</b>   | X          | X          | X          | X               |
| <b>El Ekaider</b>   |            | X          |            | X               |
| <b>Al Husainyat</b> |            |            | X          | X               |

Al Ghabawi Landfill Site shall comprise

- Leachate emission monitoring in quantity and quality (electrical conductivity)
- Landfill Raw Gas Emission (quantity and quality parameters: CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>x</sub>, SO<sub>2</sub>, H<sub>2</sub>S),
- Exhaust Gas Emission (quantity, quality parameters CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>x</sub>, SO<sub>2</sub>, H<sub>2</sub>S, and Particulate Matter)
- Ground Water Monitoring quality parameter (electrical conductivity)

# INDICATORS SELECTION - REFERENCE LISTS & RATIONALE BEHIND



**SEIS H2020  
Indicators**



**EU Indicators  
(for budget support)**



**Waste  
Management  
Strategy**

## Monitoring of waste quantities



© Lisa Riss

Municipal waste generation

MSW composition \*

Waste captured by the solid waste management and recycling system

MSW recycled, recovered and disposed

Preparing for reuse and recycling of MSW (paper, metal, plastic and glass)

Waste quantities disposed in sanitary and non sanitary landfills



# WASTE OPERATION PERFORMANCE INDICATORS

## Monitoring of the national waste management system: capacity for waste collection & treatment



© Thomas Aumann - Fotolia.com

Capacity for waste management in municipalities (equipment / resources)

Coverage of MSW street-cleaning and collection services \*

Percentage of the total municipal solid waste to: MRF, thermal treatment, MBT, sanitary landfill



# WASTE OPERATION PERFORMANCE INDICATORS

## Monitoring of the national waste management system: capacity for waste disposal



© Bernhard Groeger/Umweltbundesamt

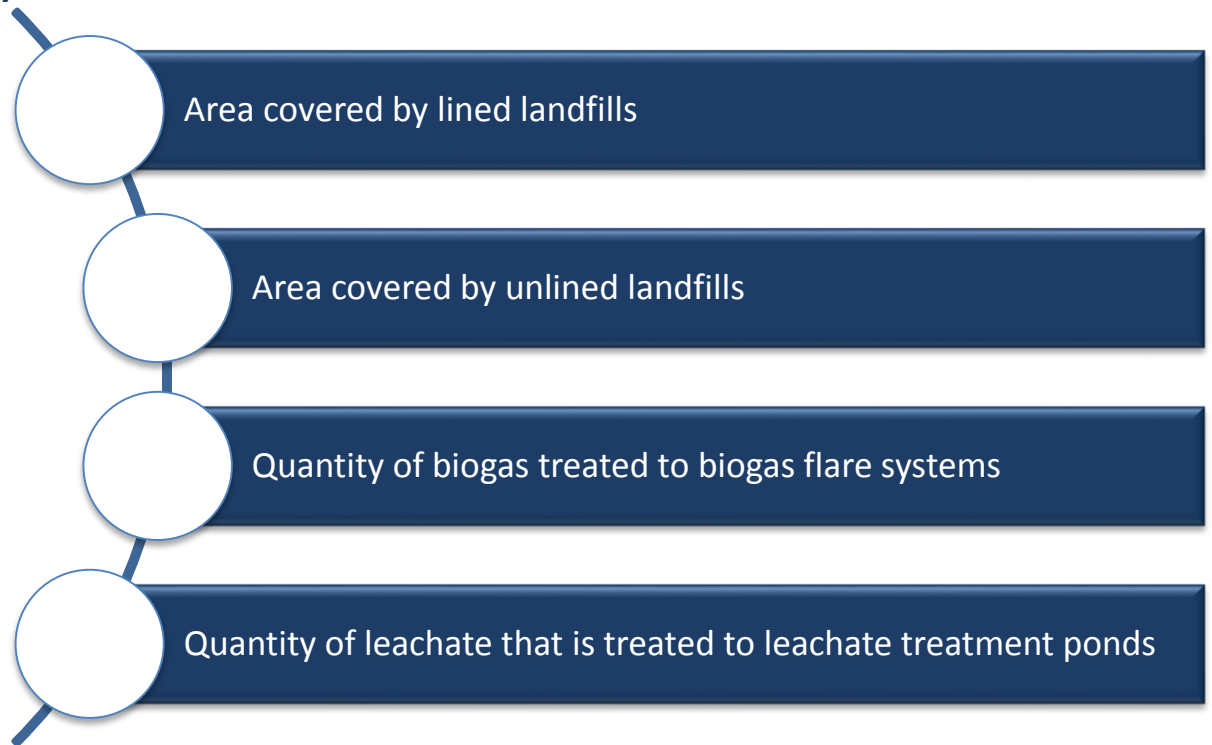
Capacity for waste management in landfills (equipment / resources)

Capacities for disposing municipal solid waste in sanitary landfills

Number of citizens served by sanitary landfill

# WASTE OPERATION PERFORMANCE INDICATORS

## Monitoring operation of sanitary and non-sanitary landfills



# ENVIRONMENTAL IMPACT INDICATORS

## Monitoring the impact of landfills on water, air and soil



© Umweltbundesamt

Quantity of methane (CH<sub>4</sub>) burnt to biogas flare system

Area of rehabilitated and vegetated dumpsites

Quality of groundwater

TOC in groundwater

# ENVIRONMENTAL IMPACT INDICATORS

## Monitoring the impact of landfills on water, air and soil



© Umweltbundesamt

Number of closed dumpsites\*

N. of uncontrolled dumpsites \*

Percentage of waste that goes to uncontrolled dumpsites \*

N. of uncontrolled dumpsites in coastal area \*

Quantities of waste going to uncontrolled dumpsites in coastal areas \*

# NMISW

nmisw

Welcome to the National Monitoring Information System for Waste!

 Login  
Already registered? Click here to login

004.589.867.206  
Current amount of waste produced in Jordan in kg since 2015



## Waste Generators

Companies that produce any amount of hazardous waste or large municipal waste quantities have to register as waste generators on this platform.

To proceed with the registration for waste generators please click on the link below.

[Register](#)




## Recycler

Any registered recycling companies in Jordan may register on this platform in order to obtain their environmental id as recycler.

To proceed with the registration for recyclers please click on the link below.

[Register](#)

## Latest News

-  The latest news can contain a link to an external site, for example for linking to news on the MoEnv homepage or a link to an uploaded file.
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## Jordan waste map



nmisw

National Monitoring Information System for Waste

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<https://test.umweltbundesamt.at/nmis/#/home>

# NMISW

English nmisw

مرحبًا بكم في نظام معلومات الرصد الوطني للمخلفات!

004.589.867.362  
الكمية الحالية من النفايات المنتجة في الأردن بالمكولوغرام منذ عام 2015

تسجيل الممثل  
لمزيد من التفاصيل انقر هنا لتسجيل الممثل



## إعادة تدوير

يمكن لأي شركات إعادة تدوير مسجلة في هذا النظام التسجيل في هذا النظام للحصول على رقم التعريف البيني الخاص بهم كمشهد التدوير.

لمتابعة التسجيل في شركات إعادة التدوير ، يرجى النقر على الرابط أدناه.

تسجيل

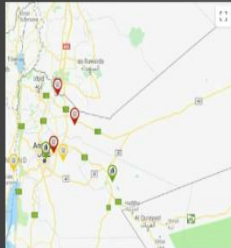
## مولد النفايات

يجب على الشركات التي تنتج أي كمية من النفايات الخطرة أو كميات كبيرة من النفايات البلدية أن تقوم بالتسجيل كمولدات نفايات على هذا الموقع.

لمتابعة التسجيل لمولدات النفايات ، يرجى النقر على الرابط أدناه.

تسجيل

## خريطة النفايات الأردنية



يمكن أن تحتوي هذه القائمة على رابط إلى موقع ويب خارجي ، على سبيل المثال للاتصال بالأخبار على صفحة MoEnv الرئيسية. يمكنه أيضًا الارتباط بملف.

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nmisw

National Monitoring Information System for Waste



إعداد: فاطمة بصمة - تميل © 2018 المملكة الأردنية الهاشمية

<https://test.umweltbundesamt.at/nmis/#/home>

nmisw عربي

Home  
Dashboard  
Master data  
Reference data  
Waste Generator  
Recycler

NMISW - Home > Waste Generator Registration

## Waste Generator Registration

Welcome Identification Contact data Waste generation Environmental management Summary Done

### Welcome

Welcome to the Registration as a Waste Generator in the National Monitoring and Information System for Waste.

The Registration Wizard will guide you through the process of registration.


Please keep the basic legal information (National Register ID) of the company/business at hand so you can fill in the forms quickly and correctly.

The completion of the registration form normally takes about 5-10 minutes.

At the end, it will show if the registration was submitted successfully.

[< Previous](#) [Next >](#)

nmisw  
National Monitoring Information System for Waste

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<https://test.umweltbundesamt.at/nmis/#/mdm/registration/waste-generator>

nmisw العربية

Home  
Dashboard  
Master data  
Reference data  
Waste Generator  
Recycler

NMISW - Home > Waste Generator Registration

## Waste Generator Registration

Welcome Identification Contact data Waste generation Environmental management Summary Done

### Identification

National register ID \*

Tradename \* Legal name \*

Main Economic Activity \* Vocational license

Legal address

Street name \* Street number


Municipality \* Country \*

Postal address same as residence address

[< Previous](#) [Next >](#)

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<https://test.umweltbundesamt.at/nmis/#/mdm/registration/waste-generator>



حضرة

شكراً لكم على التسجيل في نظام معلومات الرصد الوطني للنفايات.  
قبل المتابعة بعملية التسجيل، يجب اعتماد البريد الإلكتروني من خلال الضغط على الرابط التالي:

<https://test.umweltbundesamt.at/nmis#/mdm/registration/confirm-mail/3a6c8580-7dc3-4118-b37e-5e1fbc2b1c7c>

في حال أنكم لم تقوموا بعمل حساب نظام معلومات الرصد الوطني باستخدام هذا البريد الإلكتروني أو كان لديكم  
أسئلة عامة بخصوص عملية التسجيل، يرجى التواصل معنا على البريد الإلكتروني [contact@nmis.jordan.gov.jo](mailto:contact@nmis.jordan.gov.jo)

كل الإحترام  
فريق نظام معلومات الرصد الوطني

===== ENGLISH VERSION =====

Dear

Thank you for registering in the National Monitoring Information System for Waste.  
Before you can continue the registration you have to confirm your e-mail address by clicking on the following link:

<https://test.umweltbundesamt.at/nmis#/mdm/registration/confirm-mail/3a6c8580-7dc3-4118-b37e-5e1fbc2b1c7c>

If you did not create an NMIS-Account by using this e-mail address or if you have general questions about the registration process, please contact us at [contact@nmis.jordan.gov.jo](mailto:contact@nmis.jordan.gov.jo).

Best regards,  
Your NMIS team

إدارة البيئة

تاريخ 1/1/1

منطقة 1234

الأردن



حضرة

لقد تم التحقق من البريد الإلكتروني الخاص بكم بنجاح لنظام معلومات الرصد الوطني للنفايات. مرفق ببطية ملخص عن معلومات التسجيل. يرجى العلم بأن هذه ليست شهادة التحقق الرسمية وإنما تسجيل أولي. سيتم إرسال شهادة التسجيل الرسمية والمعتمدة إليكم بأسرع وقت ممكن بعد الانتهاء من مراجعة واعتماد العملية من قبل نظام معلومات الرصد الوطني للنفايات. سيتم إعلامكم عن طريق البريد الإلكتروني بالنتيجة بعد صدورها.

إذا كان لديكم استفسارات عامة حول عملية التسجيل، يرجى التواصل منا على البريد الإلكتروني [contact@nmis.jordan.gov.jo](mailto:contact@nmis.jordan.gov.jo).

كل الإحترام،

فريق نظام معلومات الرصد الوطني

التأكيد على عملية التسجيل الأولي في نظام معلومات الرصد الوطني للنفايات

تم تقديم المعلومات التالية للتسجيل الأولي:

التعريف

رقم التعريف الوطني:

NRID-1234567890

الإسم التجاري :

اسم الشركة

الإسم الرسمي:

اسم الشركة

النشاط التجاري الأساسي:

النقل والتخزين

رخصة المهنة:

VLID-1234567890

كمية النفايات البلدية المتولدة تزيد عن 1000 طن/سنة:

نعم

كمية النفايات البلدية المنتجة سنوياً بالطن: 1180

تولد أي كميات من النفايات الخطرة: نعم

كمية النفايات الخطرة المنتجة سنوياً بالطن: 1000

===== ENGLISH VERSION =====

Dear

You have successfully verified your e-mail address in the National Monitoring and Information System for Waste. Enclosed a summary of the given registration data is provided. Please note that this is not yet the official valid certificate but rather a preliminary registration. The final authorized and officially confirmed certificate will be sent as soon as the registration process has been reviewed and approved by the National Monitoring and Information System for Waste. Once this process is completed you will be notified by e-mail of the result.

If you have general queries or questions about the registration process, please feel free to contact us at [contact@nmis.jordan.gov.jo](mailto:contact@nmis.jordan.gov.jo).

Best regards,  
Your NMIS Team

معلومات الإتصال:

المنصب/المسمى الوظيفي:

ماجستير

الإسم الأول:

جون

اسم العائلة:

دو

رقم الهاتف:

+1234567890

عنوان البريد الإلكتروني:

example@provider.com

## Al Ghabawi - overview



# CONTACT DETAILS

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Project coordinator

M: +436645311175

[Sabah.nait@umweltbundesamt.at](mailto:Sabah.nait@umweltbundesamt.at)

