

11H10 INTELIGÊNCIA ARTIFICIAL NA CONFORMIDADE AMBIENTAL DA GESTÃO DE RESÍDUOS (AIWAM)

Pedro Santana, Inspetor do IGAMAOT



CONFERÊNCIA
**REDE NACIONAL
IMPEL 2026**

**08
MAIO
26** CC DR
NORTE

O projeto

Nome: **Inteligência artificial na conformidade ambiental da gestão de resíduos**

Nome em inglês: *the use of Artificial Intelligence in **W**Aste management and compliance **M**onitoring*

Acrónimo: AIWAM

Subgrupo do ***Gestão de Resíduos & Economia Circular***

- **WG1** KEP Training
- **WG2** Artificial Intelligence
- **WG3** Plastic recycling
- **WG4** Textile recycling
- **WG5** Risk based waste inspection plan
- **WG6** New business models
- **WG7** Organic recycling

Equipa & membros

- ▶ Project leader: Romano Ruggeri, Itália
- ▶ Referent: Pedro Santana, Portugal
- ▶ Referent: Louisa Hatton, UK

Albania	Albania/Ministry of Tourism and Environment (National	Denisa Shehu
Albania	Albania/Ministry of Tourism and Environment (National	Enxhi Oga
Cyprus	Cyprus/Ministry of Agriculture, Rural Development and the	Giorgos Kortas
Ireland	Ireland/Dublin City Council, National TFS office	Arann Keenan
Italy	Italy/Association of Regional and Provincial Agencies for	Dario Lombardi
Italy	Italy/Association of Regional and Provincial Agencies for	Romano Ruggeri
Italy	Italy/Association of Regional and Provincial Agencies for	Vincenzo Giorgi
Italy	Italy/Italian Institute for Environmental Protection and	Giulietta Rak
Kosovo	Kosovo/Ministry of Environment, Spatial Planning and Infrastructure	Safete Kuçi
Latvia	Latvia - Ministry of Climate and Energy - State Environmental	Atis Treijs
Lithuania	Lithuania/Department of Environmental Protection under	Deimantė Tarasevičiūtė
Lithuania	Lithuania/Department of Environmental Protection under	Inga Laucyte Mačernienė
Malta	Malta/Environment and Resources Authority (ERA)	Cheryl Tonna
Poland	Poland/Chief Inspectorate for Environmental Protection	Michał Ambroziewicz
Portugal	Portugal/General Inspectorate for the Agriculture, Sea, Environment	Pedro Santana
Portugal		Sandra Sofia Silva Vieira
Romania	Romania/National Environmental Guard	Marius GRIGORE
Romania	Romania/National Environmental Guard	Mihaela Monica Crisan
Spain	Spain/Economic Development, Sustainability and Environment	Unai Martinez de Estarrona
Turkey	Turkey/Ministry of Environment, Urbanisation and Climate Change	YAVUZ KÖSEKUL
Ukraine	Ukraine/State Environmental Inspectorate of Ukraine	National Coordinator (for further activity separate
United Kingdom	United Kingdom/Environment Agency (England)	Benjamin Stokes
United Kingdom	United Kingdom/Environment Agency (England)	Nick Bloomfield
United Kingdom	United Kingdom/Environment Agency (England)	Robert HaYes
United Kingdom	United Kingdom/Northern Ireland Environment Agency (NIEA)	Brian Campbell

Racional subjacente

- Melhoria da eficiência
- Conservação de recursos
- Redução de custos
- Proteção ambiental
- Contribuir para metas de sustentabilidade
- Decisão baseada em dados
- Prevenção do crime ambiental

Resultados esperados - *outcomes*

sobre o uso de IA na gestão de resíduos

- Enquadramento geral: Introdução ao conceito
- Problemas identificados na gestão de resíduos
- Potencial da IA para responder a esses desafios
- Enquadramento legal
- Estado da arte
- Principais Tecnologias e ferramentas
- Desafios de implementação
- Evidência prática (Recolha de estudos de caso)
- Abordagens regulatórias

Produtos esperados – *output*



- Relatório sobre as possíveis utilizações e os riscos associados ao uso da IA na gestão de resíduos
- Relatório dos resultados do questionário em curso
- Relatório do *workshop*



Atividades previstas 2025-2027

- Estudo de base sobre IA: pesquisa bibliográfica
- **Questionário** para recolher estudos de caso e projetos existentes
- Investigação:
 - áreas da gestão de resíduos que podem beneficiar da utilização de IA
 - uso criminal da IA na gestão de resíduos
- Análise:
 - do material recolhido
 - possíveis aplicações da IA na gestão de resíduos
- Elaboração relatório final
- Divulgação dos resultados através de um *workshop*

Questionário a decorrer (até 15 de maio)

(2025-27(III) Waste Management & Circular Economy (WMCE)) Call for Partici...

 Fotini Stamati (Basecamp) <notifications@3.basecamp.com>
Para  Pedro Santana 22/04/2026

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Fotini Stamati, General Administrative Support at IMPEL Secretariat:
Dear colleagues,

We invite you to contribute to the Questionnaire on **Artificial Intelligence (AI) and Waste**.

This survey is conducted under the framework of the Waste Management and Circular Economy project (IMPEL 2025-2027). The Artificial Intelligence in Waste sub-group **aims** to collect information to understand the opportunities and risks related to the emergence of AI in waste regulation and the waste industry. This is to ensure that as regulators, we are prepared to understand and use this technology to innovate regulatory practices, as well as understanding how and when AI may be used within industry. We are also keen to explore the challenges that AI brings.

This is a Waste and TFS specific project. Although there may be some crossover with the IMPEL-ARTIC project, this is a stand-alone project that is primarily interested in uses of AI in the Waste and TFS sector. **Please complete this questionnaire, even if your organisation is not currently using Artificial Intelligence**, as this will help us to understand what training, guidance, and products IMPEL members would find most helpful. If you don't know an answer, please leave it blank.


Purpose and use of results
We will analyse all the responses to help us understand the baseline understanding of how Artificial Intelligence in the Waste and TFS sector is currently being used across the IMPEL network and identify common challenges, best practices, and priority areas for guidance and support needed by IMPEL members.

Questionnaire structure
The questionnaire has five sections:

<https://www.surveymonkey.com/r/VFGKQSL>


Tempo estimado : 30 minutos

Outros projetos IMPEL na área



IMPEL ARTIC

ARTificial Intelligence for Compliance



Co-funded by the
European Union

A project on Artificial Intelligence in
Environmental Compliance Assurance

- Orientado para as autoridades
- *Compliance / Enforcement*
- Combate ao crime ambiental