Croatia

IAEA Member State since February 1993

Selected achievements

2019–2023: Croatia continues to improve the management of radioactive waste and spent fuel thanks to guidance received during IAEA ARTEMIS and IRRS missions.

2014: A National Strategy for the Management of Radioactive Waste, Disused Sources and Spent Nuclear Fuel is adopted. It includes plans to establish a storage facility for disused sealed radioactive sources and waste.

2010: The Mediterranean fruit fly (ceratitis capitata) emergence and release facility in Opuzen is launched.

National priorities

- Nuclear and radiological safety and security
- Food and agriculture
- Human health
- Water and the environment

Main areas of IAEA support

- · Radiation safety
- Nuclear imaging
- Interventional radiology
- Radioactive waste management

Project successes

Human health and radiation safety

With IAEA support, Croatia has been working towards improving ionizing radiation safety in medicine for over two decades. This involved developing quality assurance programmes, training medical professionals and upgrading equipment for radiotherapy and nuclear medicine.

These efforts have shaped national standards, improved cancer control and enhanced patient safety by reducing radiation doses, as highlighted during a 2019 IRRS mission.



Institute for medical research and occupational health. (Photo: Z. Tečić)

Insect and pest control

Croatia successfully protected its vital citrus farming industry — accounting for 75 per cent of mandarins for export — from the Mediterranean fruit fly pest thanks to IAEA support.

The Neretva Valley facility released 20 million sterile males weekly as part of the sterile insect technique (SIT), significantly reducing pest damage and leading to a 73 per cent decline of fruit fly presence in fig crops, and an 86 per cent decrease of their presence in mandarins.

Overall, this integrated approach increased crop production by 20 per cent, benefitting local farmers by €30 million annually.

Croatia's SIT success has inspired other countries in the region, prompting capacity building for 12 Balkan and eastern Mediterranean countries.

Radioactive waste

Croatia has been managing its radioactive waste challenge through a centralized management centre.

The IAEA has been supporting the Fund for Financing the Decommissioning of the Krško Nuclear Power Plant with human resources, expert reviews and specialized training. This support ensures adherence with international safety standards and their integration into the

Third Revision of the Krško NPP Radioactive Waste Programme.

The IAEA was also involved with the conceptual design of the Radioactive Waste Management Centre, and continues to support it by reviewing safety documentation, communication plans and the conceptual design of an information centre.

Participation in the major initiatives

• ZODIAC

Date of imPACT Review(s)

2014



Clinical hospital Dubrava. (Photo: Z. Tečić)

IAEA support received in the 21st century 151 **323 600** 33 national fellows and training meeting expert missions **TC** projects scientific visits participants participants received implemented

