European Commission

EU Research on Endocrine Disruptors

Endocrine disrupting chemicals, or shortly, endocrine disruptors or EDCs, are exogenous chemicals that interfere with the endocrine (hormone) system and may produce adverse health effects in both humans and wildlife.

Different substances found in everyday products are proven or suspected to cause endocrine disruption. To support EU chemical policies and to address increasing public concern, the **European Union's Research and Innovation Framework Programmes** have dedicated in the past three decades significant funding to research on understanding the potential environmental and health risks of EDCs.

Up to present, over **€150 million** has been invested in research projects on EDCs. The projects have aimed at better understanding the mechanisms of action of these chemicals and their adverse effects on human health and wildlife, at developing tools to identify chemicals as EDCs or at monitoring people's exposures. Beyond these EDC related projects, many more research initiatives have been funded to increase the knowledge on the safety of chemicals to which humans and the environment are exposed. For example, the research carried out under the **PROTECTED** Innovative Training Network is improving our capacities to detect EDCs, while **EDC-MIXRISK** has advanced our knowledge on how EDCs can interact to exert their effects on humans, thus paving way for protective health measures.

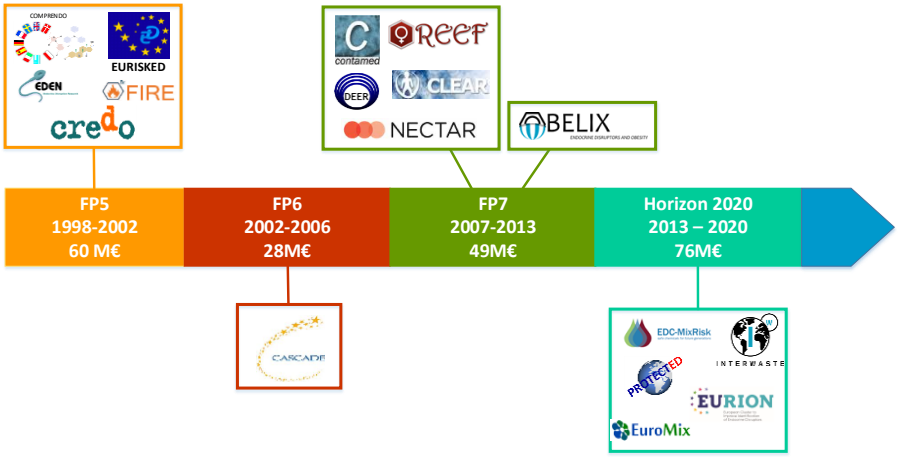
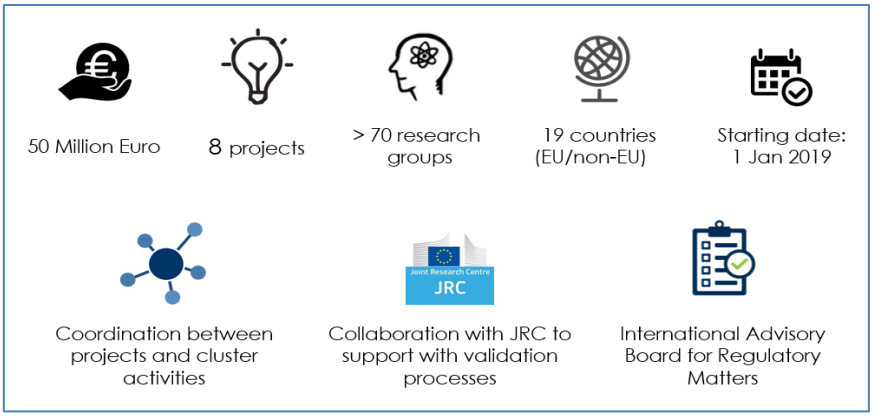


Figure 1. Schematic representation of the EU contribution and projects (acronyms) involved in the research on endocrine disruptors (more info at CORDIS)

European Commission

EU Research on Endocrine Disruptors: The EURION cluster

In 2018, a Horizon 2020 call for proposals for new testing and screening methods for endocrine disruptors was launched, with a budget of €50 million from the EU. The eight new projects started in early 2019. They have formed the **EURION cluster** to synchronise efforts and will also closely cooperate with the Commission's Joint Research Centre, especially as regards validation and regulatory uptake, and contribute to ongoing international EDC related activities.



athena	edcmet	ENDPOINTS	ERGO
ATHENA Assays for the identification of thyroid hormone axis-disrupting chemicals: elaborating novel assessment strategies (2019-2024)	**EDCMET** Metabolic effects of endocrine disrupting chemicals: novel testing methods and adverse outcome pathways (2019-2024)	**ENDPOINTS** Novel testing strategies for endocrine disruptors in the context of developmental neurotoxicity (2019-2024)	**ERGO** Breaking down the wall between human health and environmental testing of endocrine disrupters: endocrine guideline optimisation (2019-2024)
athenaedctestmethods.net	www.uef.fi//en/web/edcmet	https://endpoints.eu/	https://ergo-project.eu/

freia PROJECT	GOLIATH	OBERON	SCREENED
FREIA Female reproductive toxicity of EDCs: a human evidence-based screening and identification approach (2019-2024)	**GOLIATH** Integrating epidemiology and experimental biology to improve risk assessment of exposure to mixtures of endocrine disrupters (2019-2024)	**OBERON** An integrative strategy of testing systems for identification of EDs related to metabolic disorders (2019-2024)	**SCREENED** A multistage model of thyroid gland function for screening endocrine-disrupting chemicals in a biologically sex-specific manner (2019-2024)
http://freiaproject.eu/wp/	https://goliath.wp.hum.uu.nl	https://oberon-4eu.com/	https://www.screened-project.eu/

Research and Innovation

March 2020

Future research on EDCs

In the next framework programme for research and innovation, Horizon Europe (2021-2027), the Commission intends to continue supporting research on protecting citizens and environment from exposure to harmful chemicals, including endocrine disruptors.

More information

https://ec.europa.eu/research/health