



ABOUT THE SF6-FREE PROJECT



A GREENER DYNAMITRON®

SF6 is one of the most powerful greenhouse gases. In the Dynamitron®, it enables to sustain very high DC voltage. This project aims at demonstrating and validating economically viable climate-friendly alternatives to SF6 in order to significantly decrease the Dynamitron® carbon footprint.



PROMOTING CLIMATE-FRIENDLY INSULATING GASES

SF6 remains the most common insulating gas used in high voltage applications. The knowledge generated in this project will contribute to the development and deployment of SF6 alternatives in the power sector.



A COLLABORATION ACROSS SECTORS

The SF6-Free project is a partnership between IBA, General Electric and the University of Manchester rooted in their common commitment to the environment and the community. The project has been awarded funding at 60 percent of the total costs of EUR 3 million through LIFE 2017 program from the European Union.



MILESTONES

2017	Summer	First contacts between IBA, the University of Manchester and General Electric regarding SF6 alternatives in the high voltage sector
	September	Submission of the SF6-Free Project to the EU LIFE 2017 funding program
2018	Мау	The SF6-Free project is granted funding from EU LIFE 2017 program
	July	The LIFE_SF6-Free project has officially started
	12-13 September	Workshop in Manchester on dielectric testing
	2-3 October	LIFE17 Climate Action projects Kick-off
	4-5 October	Workshop in Lyon on materials compatibility testing
	November • December	Test benches preparation
2019	January • April	Preliminary testing at Manchester and Lyon
	15-16 January	LIFE_SF6-Free poster "The Search for an Economically Viable and Climate-friendly Alternative for Replacing SF6 in HV Accelerator Applications" at 12th Universities High Voltage Network Colloquium [UHVNET]
2020	November	End of the project
2024	TARGET	Avoid the equivalent of 40,000 tons of CO2 emissions

KEY FIGURES

80%

About 80% of the SF6 annual consumption comes from switchgears and gas insulated lines where it is used for its insulating and arc quenching properties.

-25%

OF IBA CARBON FOOTPRINT

The carbon savings potential for IBA is significant and represents 25% of IBA's current carbon footprint.

-60%

DYNAMITRON CARBON EMISSIONS

SF6 enables to sustain ip to 5 MV DC voltage and can amount up to 4 tons for the biggest equipment. The investigated alternatives are expected to reduce the Dynamitron®'s carbon emissions by 60%.

-40,000

TONS OF CO.

SF6 has a global warming potential 23,500 higher than CO2 and 3,200 years atmospheric lifetime. The target is to avoid the equivalent of 40,000 tons of CO2 emissions by 2024.







IBA INDUSTRIAL IN A NUTSHELL

IBA INDUSTRIAL is the world leader in electron and proton accelerators for industrial applications.

IBA's unique E-beam, X-ray and Proton treatment solutions are used across the world in many different applications such as medical device sterilization, food pasteurization, wire and cable crosslinking, property enhancement for various materials, safety and detection, crystal modification, etc.

IBA Industrial supplies turn-key irradiation solutions from site planning and optimization, engineering and integration of all operational sub-systems to assistance in operation.

Over 250 IBA Industrial accelerators are used in the world today, some for more than 50 years.

IBA GROUP

IBA delivers solutions of unprecedented precision in the fields of cancer diagnosis and therapy. The company also offers sterilization and ionization solutions to improve the hygiene and safety of everyday life.

IBA, a Belgian company, is listed on the Paneuropean stock exchange FURNNEXT

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