

Table 1. An overview of projects relating to catalyst recycling carried out in Poland

Title of the project	Implementation period	Beneficiary	Description of the project	More information
Development of an innovative fully automated and mobile catalyst recycling technology	2014 - 2020	Unimetal Recycling Sp. z o.o.	<ul style="list-style-type: none"> - The main target will be to develop an innovative, fully automated yet mobile technology for catalyst recycling. - The aim of the conducted R&D works will be to develop a method for placing a technological line located in a container building in a large production plant on a daily basis. - Such a solution will enable many catalyst purchasers and vehicle disassembly stations to recycle the catalysts in the place located closest to them, without the need to transport the material to the headquarters of the Applicant. 	https://mapadotacji.gov.pl/projekty/1101250/
Launch of a pilot line for the production of ecological catalytic systems including sustainable recycling of critical materials	2016 – 2019	AWG Polonez Tomasz Debowski	<ul style="list-style-type: none"> - Washcoat from the recovery of precious metals used to make the active layer of the catalyst. - The result of the project is an innovative product which will be monoliths in unusual shapes meeting the specific requirements of the end user. 	http://www.polonez-kat.com.pl/pl/o-projekcie/ https://mapadotacji.gov.pl/projekty/743491/
Implementation of innovative technology for processing car catalysts for the production of precious metals	2014 – 2020	KAT-RECYKLING	<ul style="list-style-type: none"> - Precious metals recovered as a result of implementing new technologies in the field of automotive catalyst processing. - A new precious metal recovery technology will be implemented, as well as an increase in innovation and 	https://www.kat-recykling.pl/fundusze-europejskie,ap20.html https://mapadotacji.gov.pl/projekty/752944/

			employment in the enterprise.	
Technology for converting automotive catalysts to produce precious metals	2014 – 2020	KAT-RECYKLING	<ul style="list-style-type: none"> - The main objective is to develop a process and innovative product on a national scale in the field of precious metals recovery from automotive catalysts. - The specific objective will be the purchase, assembly and commissioning of an innovative process line for catalyst recycling. - The basic technological innovation is the application of a technological system for the grinding of metallic catalysts without the need to separate the casing from the monolithic catalytic input. 	https://mapadotacji.gov.pl/projekty/826395/
Development of a technology for manufacturing an exhaust filter housing and catalyst housing with new properties and increased utility parameters	2019 - 2021	PPHU ROCH	<ul style="list-style-type: none"> - Develop a technology for the production of exhaust filter housings and a catalyst housing with new properties and increased utility parameters. - A demonstration line will be created and launched and the technology will be tested in real conditions. - The technology thus developed will permit the introduction of an innovative product on a European scale with new properties and improved performance parameters. 	http://www.roch.pl/s52-projekty-ue---zam%C3%B3wienia.html https://mapadotacji.gov.pl/projekty/855346/
Implementation of a new catalyst production technology with replaceable filter for complete exhaust systems	2014 – 2020	Vanstar	<ul style="list-style-type: none"> - Implementation of a new technology for the production of catalytic converters with an interchangeable filter. - The implementation of the new catalytic converter will reduce the energy and material intensity of production and operation. 	https://mapadotacji.gov.pl/projekty/780793/ http://www.vanstar.pl/dotacja.php?id=3

			- This will make it possible to reuse structural elements without having to replace them completely.	
The implementation of an innovative technology for the production of a metal insert for a car exhaust catalyst	2007 – 2013	LINDO CATSYSTEM	Improving air quality by reducing the weight and number of particles in the exhaust gases.	http://www.lindocatsystem.pl/dotacje-ue https://mapadotacji.gov.pl/projekty/723518/

Source: own work based on companies' webpage