



IMPROVED LIFETIME STACKS FOR HEAVY DUTY TRUCKS THROUGH ULTRA-DURABLE COMPONENTS

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DELIVERABLE REPORT

D12: TRUST REPORTING 2022		
Due Date	30/06/2022	
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Workpackage	WP1	
Workpackage Leader	CNRS	
Lead Beneficiary	CNRS	
Date released by WP leader	29/03/2022	
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DISSEMINATION LEVEL		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	X
NATURE OF THE DELIVERABLE		
R	Report	
P	Prototype	
D	Demonstrator	
O	Other	X

SUMMARY	
Keywords	Annual data reporting, TRUST
Abstract	<p>Annual data reporting (TRUST) for the calendar year 2021 has been completed for IMMORTAL for the template</p> <ul style="list-style-type: none"> Fuel cell research at stack level or lower
Public abstract for confidential deliverables	<i>Same as above</i>

REVISIONS			
Version	Date	Changed by	Comments
1.0	29/03/2022	D. Jones	Drafted

TRUST REPORTING 2022

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1 INTRODUCTION

Single cell and stack data are collected annually using the on-line tool TRUST. IMMORTAL was required to complete the on-line data template to reflect the 2021 status of IMMORTAL technology.

2 SCOPE

Data were submitted to the TRUST portal on 29th March 2022 for the template “Fuel cell research at stack level or lower”. Data from the IMMORTAL initial short stack were provided by partner Bosch.

3 DISCUSSION

Of the 29 entries, 18 are public. The public entries are given in the annex.

A link to the TRUST portal is provided below:

<https://trust.fch.europa.eu>

4 CONCLUSIONS AND FUTURE WORK

Future work is described in the EU Survey report that was submitted on 15 March 2022.

5 ANNEX – PUBLIC ENTRIES IN SUBMISSION TO TRUST

Year	Project Display Name	Research Object Displ. Template Display Nam	Template Version	Classification	Order	Parameter Display Nar	Input type	Measurement Type	Value	Corrected value	Confidentiality level
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	1	Start date for reporting	date		01/01/2021		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	2	End date for reporting	date		31/12/2021		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	3	Stack manufacturer	freeText		Bosch		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	4	Fuel cell technology	list		PEMFC - Proton exchange membrane fuel cell		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	5	Fuel	list		Hydrogen		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	7	Stack weight	quantity	kg			Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	7	Stack volume	quantity	l			Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	8	Number of cells per sta	quantity		10		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	9	Active cell area	quantity	cm ²	300		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	10	At start level: Capacity	quantity	kW	3.6		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	11	Catalyst at the cathode	freeText		0.6 mg(Pt)/cm ²		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	12	Catalyst at the anode	freeText		0.15 mg(PGM)/cm ²		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	14	KPI - At start level: stac	quantity	%	54		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	15	KPI - Est. stack CAPEX (j	quantity	EUR/kW	50		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		DESCRIPTIVE	16	KPI - PGM loading	quantity	g/kW	0.3		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		OPERATIONAL	10	Operating pressure	quantity	bar	2.0		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		OPERATIONAL	11	Operating temperature	quantity	Å°C	68		Public
2021	IMMORTAL	IMMORTAL_FC stack le Fuel cell research at sta v18		OPERATIONAL	9	Hours of operation	quantity	h	3400		Public

