

DICHIARAZIONE AMBIENTALE DI PRODOTTO

EPD

Conforme a:
ISO 14025:2006 e
EN 15804:2012 +
A2:2019/AC:2021



Massetto cementizio

Prodotti inclusi nella EPD:

- BS20
- BS25
- BS30
- BS30R-7
- BS30R-14
- BS30R-21
- BS40HR
- BS40THINN
- BS40THINN + Agent

Program Operator

EPD Italy

Publisher

EPD Italy

EPD Owner

Boden Service S.r.l.

Numero Dichiarazione

EPDMASSETTOBODEN01_2025_Rev.1.0

Numero Registrazione

EPDITALY1375

Data di rilascio

2026-09-25

Data di scadenza

2031-09-25

sviluppata con LCA Tool PCT

RETANOL®

di proprietà PCT Italia srl

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INFORMAZIONI GENERALI

EPD OWNER

Nome della società	Boden Service S.r.l.
Sede legale	Via Luigi Negrelli 3 39100 Bolzano
Contatti per informazioni sull'EPD	0471 288034

PROGRAM OPERATOR

EPDItaly	Via Gaetano De Castillia n° 10 - 20124 Milano, Italy
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INFORMAZIONI SULL'EPD

Nome prodotto	BS20, BS25, BS30, BS30R-7, BS30R-14, BS30R-21, BS40HR, BS40THINN, BS40THINN+Agent
Sito di produzione	Impianto mobile su autocarro specializzato
Descrizione sintetica e informazioni tecniche del prodotto	Massetti prestazionali preconfezionati a legante cementizio con aggiunta di additivi polimerici tipo RETANOL EKA Pro, XTreme Pro, XThinn Neatherm, Risol Pro ed Agent Pro.
Campo di applicazione del prodotto	Massetto di supporto per edilizia
Tipologia di EPD	EPD specifica di più prodotti basata su un TOOL qualificato
Norme di riferimento del prodotto	EN 13813
CPC Code (numero) https://unstats.un.org/unsd/classifications/Econ	3751

INFORMAZIONI SULLA VERIFICA

PCR	PCR per i prodotti da costruzione: ICMQ-001/15 V 4.0 (conforme alla EN 15804+A2)
Regolamento EPDItaly	REGOLAMENTO DEL PROGRAMMA EPDItaly, Revisione 7.1, 05/09/2025
Project Report LCA	01_PCT_Italia_LCA_tool_project_report_v1.0
Statement Verifica Indipendente	La revisione della PCR è stata eseguita da ICMQ - info@epditaly.it. Verifica indipendente della dichiarazione e dei dati svolta secondo ISO 14025:2010. ☐ Interna ☒ Esterna Verifica di terza parte eseguita da: ICMQ S.p.A., via Gaetano De Castillia n° 10 - 20124 Milano, Italia. Accreditato da Accredia.

Statement Comparabilità	Dichiarazioni ambientali pubblicate all'interno della stessa categoria di prodotto, ma provenienti da programmi differenti, potrebbero non essere confrontabili. In particolare, EPD di prodotti da costruzione possono non essere confrontabili se non conformi alla EN 15804:2012+A2:2019.
Statement Responsabilità	L'EPD Owner solleva EPDItaly da qualunque inosservanza della legislazione ambientale. Il titolare della dichiarazione sarà responsabile per le informazioni e gli elementi di prova giustificativi. EPDItaly declina ogni responsabilità riguardo alle informazioni, ai dati e ai risultati forniti dall'EPD Owner per la valutazione del ciclo di vita.

1 Introduzione

1.1 La nostra Azienda

Chi Siamo: Sinergia, Territorio ed Evoluzione Tecnica

Boden Service Srl, con sede a Bolzano, nasce dall'unione strategica di tre storiche realtà imprenditoriali da anni radicate e attive sul territorio del Trentino-Alto Adige. Questa fusione nasce da una visione condivisa: integrare in un'unica struttura aziendale competenze specialistiche e complementari, maturate lavorando in stretta sinergia nei diversi segmenti delle pavimentazioni e delle strutture cementizie.

Oggi Boden Service si propone al mercato come un **interlocutore unico e strutturato**, capace di garantire al cliente, dal progettista all'impresa edile, un servizio completo, puntuale e ad altissimo valore tecnologico in materia di pavimentazioni orizzontali e isolamenti speciali.

Il Nostro Campo d'Azione: Soluzioni Integrate per l'Edilizia

La forza di Boden Service risiede nella capacità di coprire l'intero ciclo di vita delle superfici orizzontali, combinando l'assistenza ingegneristica in fase di progettazione preliminare con un'esecuzione d'eccellenza. Il nostro portfolio applicativo comprende:

- **Sottofondi e Massetti di Supporto:** Realizzazione di sistemi cementizi ad alte prestazioni, ottimizzati per la posa di qualsiasi rivestimento e per l'integrazione con impianti radianti.
- **Pavimentazioni Architettoniche e Decorative:** Soluzioni di finitura customizzate per il settore residenziale e commerciale, tra cui massetti levigati, superfici ad effetto industriale e sistemi decorativi continui.
- **Superfici Industriali e Infrastrutturali:** Progettazione e posa di pavimentazioni industriali in calcestruzzo, rampe di accesso e camminamenti esterni, dimensionati per resistere a sollecitazioni meccaniche e chimiche gravose.
- **Sistemi in Resina e Impermeabilizzazioni:** Applicazione di rivestimenti continui in resina per uso industriale, commerciale e decorativo, oltre a soluzioni di impermeabilizzazione avanzata in resina per la protezione durevole delle strutture.

Dalla Progettazione alla Posa: Il Valore del Partner Unico

Operare in un contesto geografico e normativo esigente come quello del Trentino-Alto Adige ci spinge a superare il concetto di semplice "posatore". Boden Service affianca la committenza sin dalle prime fasi di studio del pacchetto stratigrafico, analizzando le specificità del cantiere per determinare lo spessore, il dimensionamento strutturale e la miscela ideale.

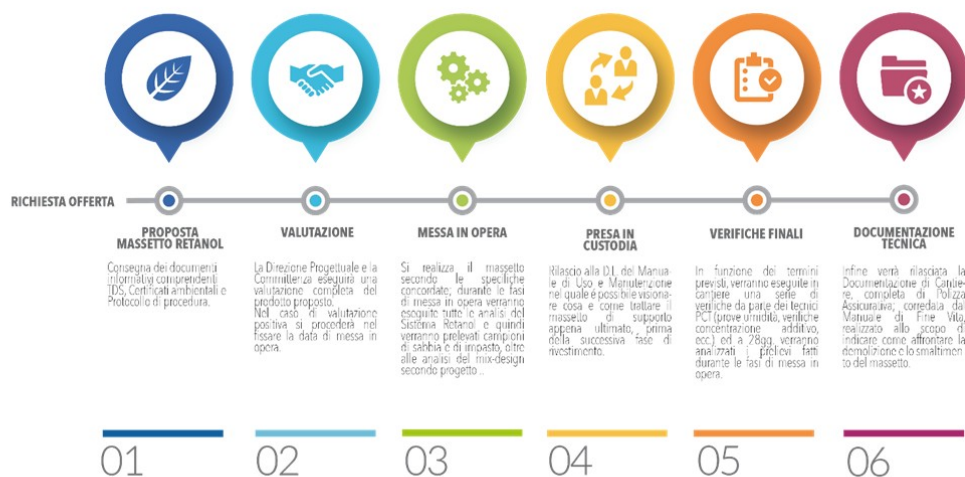
Grazie a questo approccio ingegnerizzato, supportato da una logistica d'avanguardia, trasformiamo le esigenze progettuali in superfici durevoli, performanti e conformi ai più severi standard qualitativi nazionali ed europei.

1.2 Il nostro sistema di lavoro: il Protocollo Operativo

In sinergia strategica con il nostro partner tecnico PCT Italia, operiamo secondo un rigido Protocollo Operativo. Questo sistema di gestione della qualità e della posa standardizza ogni fase di lavoro — dalla caratterizzazione delle materie prime al controllo del prodotto indurito —, assicurando la perfetta conformità prestazionale e ambientale dei massetti realizzati.

Massetto RETANOL TIMELINE

Mapa concettuale con le varie fasi della produzione di un Massetto Retanol, dall'offerta alla consegna dei documenti finali, passando attraverso l'iter procedurale del Sistema Retanol.



2 Descrizione dei prodotti

2.1 Descrizione generale

Questa EPD si riferisce a più prodotti di tipo massetto, prodotti dall'azienda proprietaria dell'EPD. I prodotti di cui si riportano i profili di impatto sono riportati in tabella.

Elenco prodotti

Nome prodotto	Descrizione
BS20	Malta cementizia classificata CT-C20-F4 confezionata con l'utilizzo di Risol Pro dosato a 0,5 L/m3
BS25	Malta cementizia classificata CT-C25-F5 confezionata con l'utilizzo di Risol Pro dosato a 0,5 L/m3
BS30	Malta cementizia classificata CT-C30-F6 confezionata con l'utilizzo di Risol Pro dosato a 0,75 L/m3
BS30R-7	Malta cementizia a rapida essiccazione (7gg) classificata CT-C30-F6 confezionata con l'utilizzo di Eka Pro dosato a 1,75 L/m3
BS30R-14	Malta cementizia a rapida essiccazione (14gg) classificata CT-C30-F6 confezionata con l'utilizzo di Eka Pro dosato a 1,25 L/m3
BS30R-21	Malta cementizia a rapida essiccazione (21gg) classificata CT-C30-F6 confezionata con l'utilizzo di Eka Pro dosato a 1,00 L/m3
BS40HR	Malta cementizia a rapida essiccazione classificata CT-C40-F8 confezionata con l'utilizzo di XTreme Pro dosato a 2,00 L/m3
BS40THINN	Malta cementizia a rapida essiccazione classificata CT-C40-F8 confezionata con l'utilizzo di XThinn dosato a 2,00 L/m3

Nome prodotto	Descrizione
BS40THINN + Agent	Malta cementizia a rapida essiccazione classificata CT-C40-F8 confezionata con l'utilizzo di XThinn dosato a 2,00 L/m3 e Agent Pro dosato a 8Kg/m3

L'integrazione tecnologica degli additivi della gamma **RETANOL** permette di eliminare l'impiego della rete elettrosaldata all'interno del massetto mantenendo le medesime performance meccaniche.

2.2 Caratteristiche tecniche

I prodotti in oggetto di EPD sottostanno alle seguenti norme tecniche che ne definiscono le prestazioni. Non esiste una norma di prodotto armonizzata specifica e le caratteristiche essenziali sono quindi riportate per analogia con il settore calcestruzzi.

Caratteristiche additivo

Caratteristiche	Risultati
Consistenza	Liquida
Densità (a +20 °C)	1.05-1.11 g/cc
Temperatura di applicazione	>5 °C
Storing	>+0 °C protetto da luce solare diretta, fino a 12 mesi

Caratteristiche massetto

Caratteristiche	Risultato	Note
Resistenza a compressione	25-40 N/mc	28 giorni dopo l'installazione
Resistenza a flessione	5-8 N/mc	28 giorni dopo l'installazione
Pedonabilità	24 h	
Carichi leggeri	2-3 giorni	
Ritiro igrometrico	approx. 0.4 mm/m	
Conduttività termica	1.60-2.35 W/mK	UNI EN 12664:2002
Espansione termica	0.012 mm/m/K	
Classe di reazione al fuoco	A1fl	
Posa senza rete zincata e fibre	Sì	

2.3 Composizione dei prodotti

Il prodotto viene realizzato nell'unità mobile ed installato sfuso. Non ha quindi un imballo.

Ricette standardizzate

Elementi impasto	UdM	RISOL PRO	EKA PRO	XTREME PRO	XTHINN NEATHERM
Aggregati*	kg/UD	1650	1650	1650	1650
Cemento*	kg/UD	250	250	312-375	da 312
Acqua*	kg/UD	125	125	156	156
Additivo	kg/UD	0.50-0.75	1.00-2.00	2.00	2.00
AgentPRO	kg/UD	0.00-6.00	0.00-6.00	0.00-8.00	0.00-8.00

*Il valore dichiarato da ricetta standardizzata può subire delle leggere variazioni $\pm 10\%$ in funzione del raggiungimento della resistenza caratteristica del prodotto. Lo sviluppo e la rettifica della ricetta viene effettuata a seguito di un numero minimo di 3-5 prove e successivamente monitorata nel tempo al fine di garantire uno standard di risultato in linea con quanto richiesto dal Massetto RETANOL selezionato.

3 Processo produttivo

La produzione del massetto prevede il carico materia prime sul camion, per i quali vengono considerati anche i consumi derivanti da trasporto e energia per carico e scarico del materiale (A1-A3). Segue la distribuzione al cliente e la posa in opera mediante miscelazione con acqua (A4-A5). La fase di vita utile B1 considera il contributo dalla carbonatazione del cemento, vengono esclusi interventi di manutenzione. Il fine vita (C1-D) comprende la demolizione meccanica, il trasporto dei rifiuti, il riciclo, lo smaltimento in discarica ed il calcolo dei benefici ambientali.

3.1 Il camion per massetto

Le nostre malte cementizie vengono confezionate direttamente in cantiere, a piè d'opera, coniugando la flessibilità della produzione *on-site* con i rigorosi standard qualitativi di un processo industriale. Grazie all'impiego di **impianti di produzione mobili automatizzati**, garantiamo impasti standardizzati e costantemente ripetibili.

Il sistema si basa su **celle di carico integrate** che pesano elettronicamente ogni singolo componente prima dell'immissione nella camera di miscelazione. Il controllo di processo è affidato a **centraline di comando autonome**, che permettono il monitoraggio, la verifica e la diagnostica dei parametri d'impasto anche da remoto, assicurando la perfetta tracciabilità della produzione. La produzione mobile consente di miscelare esclusivamente i volumi necessari all'opera, limitando i residui di fine lavorazione.

Il camion per la miscelazione del massetto ha un sistema di alimentazione a gasolio e possiede un sistema automatizzato delle registrazioni della produzione.

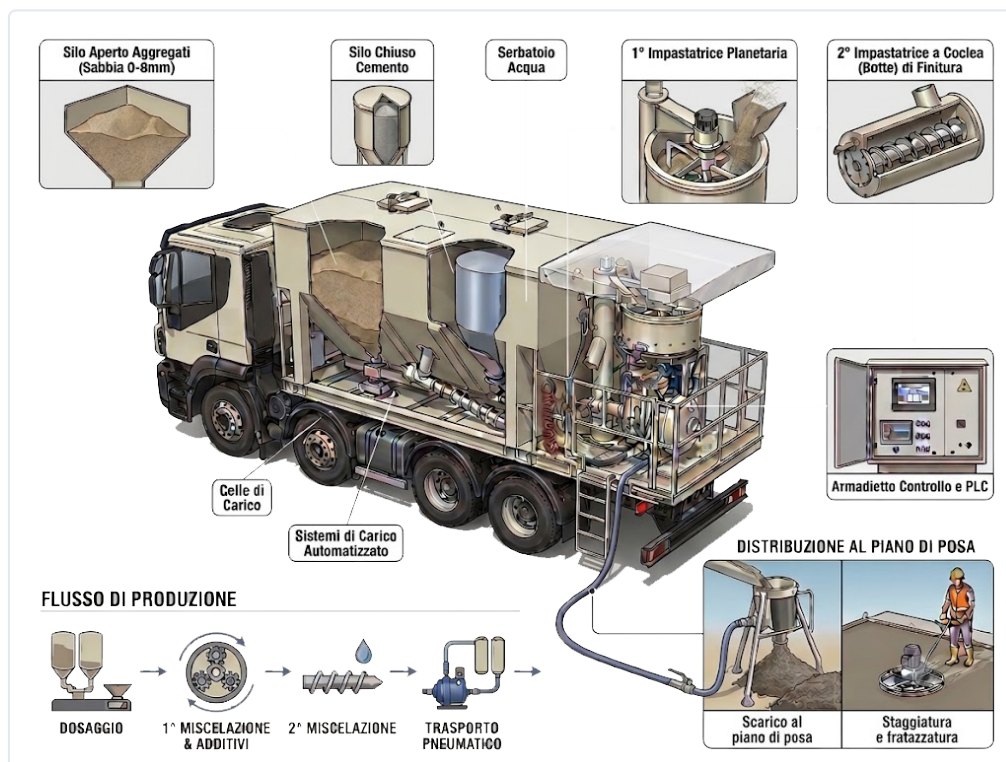


Diagramma di flusso della produzione di massetto

4 Metodologia di calcolo

4.1 Unità dichiarata

1m³ di massetto posato in opera e prodotto in cantiere con mezzo dedicato

4.2 Vita utile di servizio

50 anni

4.3 Moduli dichiarati del ciclo di vita

	PRODUCT STAGE 			CONSTRUCTION PROCESS STAGE 		USE STAGE 								END OF LIFE STAGE 				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
	Raw material supply	Transport	Production	Transport from the gate to the site	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse-recovery- recycling- potential	
MODULE	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
Module declared	X	X	X	X	X	X	ND	ND	ND	ND	ND	ND	X	X	X	X	X	

Moduli del ciclo di vita come da EN 15804

4.4 Rappresentatività temporale e ambito geografico

L'anno di riferimento è il 2025.

L'ambito geografico è l'Italia.

4.5 Database, metodo di calcolo e software

Il database utilizzato è Ecoinvent 3.11 EN 15804.

Il metodo di calcolo degli impatti è quello definito dalla norma EN 15804 (EF3.1).

Il software di elaborazione dei dati secondari è OpenLCA 2.6.1 mentre l'EPD è generata tramite il Tool qualificato "LCA Tool PCT Retanol"

4.6 Allocazioni

Non è stata applicata alcuna allocazione, perchè i dati primari ed i processi produttivi sono risultati già specifici.

Per i dati generici (database), le allocazioni esistenti sono state mantenute.

4.7 Qualità dei dati

I dati derivano in gran parte da fonti primarie, come la ricetta estrapolata dalla scheda tecnica degli additivi dell'azienda, e dalla letteratura o misurazione diretta dei consumi di produzione. Inoltre, i dati utilizzati in questo studio derivano da una revisione approfondita tra le parti effettuata in diversi passaggi, per verificare l'accuratezza e la qualità dei dati.

I dati considerati nello studio LCA rispettano i requisiti e le indicazioni di EN 15941:2024 e EN15804:2012+A2:2019 in termini di qualità dei dati.

Il livello generale di qualità dei dati utilizzati per questo studio LCA è riportato in conformità con l'Allegato C EN 15941:2024, Esempio 4, per la rappresentatività geografica, tecnologica e temporale dei dati primari forniti dall'azienda e dei dati generici selezionati nel database Ecoinvent 3.11.

Raccolta dati	I dati raccolti sono rappresentativi di un anno di produzione (01/01/2025-31/12/2025).
Siti usati	Il carico del camion massetto avviene in un sito di produzione localizzato presso la sede del proprietario dell'EPD. A seguire, la produzione avviene nel cantiere.
Geografia	I prodotti finali vengono commercializzati a livello regionale.
Tecnologia	Tutti i dati di inventario rappresentano molto bene l'approccio tecnologico dell'azienda.
Dati di inventario	Calcolato sulla base dei dati disponibili per l'anno 2025 sul sistema di gestione aziendale.
Database dei fattori di emissione	Ecoinvent 3.11 EN 15804
Schema di qualità dei dati	EN 15804:2012+A2:2019, Annex E, Table E.1
Dati maggiormente rilevanti	Tutti i dati rilevanti provengono da A1, che contribuisce con più dell'80% dell'impatto assoluto totale di tutti gli indicatori EPD.
Uso di dati "Fair" con più del 30 % di un impatto core; Uso di dati rilevanti "Poor"; Uso di dati rilevanti "Very poor"	L'impatto principale in termini di GWPT deriva dai moduli A1–A3, per i quali sono stati utilizzati solo dati molto validi. Tra i dati rilevanti, non ci sono valutazioni "Fair, Poor e Very Poor" associate a contributi superiori al 30%. Per gli scenari A5, C1-C4, gli scenari di rifiuti hanno una buona rappresentanza geografica e tecnica.

Il fattore di emissione associato al cemento è stato ottenuto dal Database Ecoinvent 3.11/EPD fornita dal produttore

4.8 Cut-off ed esclusioni

Tutte le attività che non influenzano significativamente il ciclo di vita dei prodotti come riportato di seguito sono escluse dal confine del sistema e da questo studio LCA. Nello specifico: (i) Impatti ambientali legati alle persone, come i spostamenti da e verso il lavoro. (ii) Attività di ricerca e sviluppo. (iii) Attività d'ufficio e commerciali (amministrazione, R&S/design, approvvigionamento, ecc.) relative agli impianti di produzione. (iv)Attività di pulizia.

I seguenti flussi di input sono stati esclusi in base ai criteri di soglia sulla massa: Confezione del sacchetto per l'additivo AgentPRO.

5 Descrizione del processo e dei dati usati

A1 Materie prime ed elettricità

Tutti i materiali acquistati e caricati sul camion per la produzione del massetto sono stati inclusi. I dati relativi alle quantità e le tipologie di materiale sono definiti dal proprietario dell'EPD in base alle prestazioni finali del massetto, e in base alla ricetta a seconda dell'additivo utilizzato.

A2 Trasporto a monte

Il carico del materiale sul camion per massetti può avvenire in sede o in cantiere. E' stato considerato uno scenario standard e cautelativo in cui le materie prime vengono caricate in sede.

In questa categoria, sono stati considerati tutti i processi relativi al trasporto dei materiali in input allo stabilimento di carico del camion massetto. Le distanze del trasporto vengono calcolate con Google Maps e inserite dall'utente nel tool.

A3 Manufacturing

Questa fase include tutti i processi, che avvengono nelle strutture aziendali, necessari per caricare il camion a massetto.

Come specificato dalla EN 15804, sono stati inclusi anche il trasporto e il trattamento dei rifiuti della produzione (serbatoio additivo).

A4 Trasporto a valle

Il trasporto al cliente è incluso in questa fase. La distanza utilizzata è la distanza media del cliente per l'anno 2025.

A5 Installazione e costruzione

Questa fase comprende la produzione del massetto in cantiere, che prevede la miscelazione degli ingredienti con acqua e la successiva posa in opera.

Fase di utilizzo B

Questa fase è stata inclusa nell'analisi a causa dell'impatto della carbonazione (B1) del cemento. Non vengono considerate operazioni di manutenzione o ripristino.

C1 Decostruzione, demolizione

La rimozione con una macchina a combustione diesel è stata presunta alla fine della vita del massetto, generando Scorie di Demolizione per Edilizia (CDW). Lo scenario applicato si basa sui dati predefiniti forniti nella Tabella 4 della IES Construction Products PCR 2019:14, Versione 2.0.1, che si riferisce alla demolizione/decostruzione di acciaio, legno e altri materiali e include un consumo diesel di 1,1 kWh/tonnellata.

C2 Trasporto per la lavorazione e/o lo smaltimento dei rifiuti

Sono stati valutati i flussi di rifiuti trasportati dal cantiere ai cantieri di trattamento e allo smaltimento finale. Una volta demolito il massetto viene trasportato al centro di trattamento. Il calcolo degli impatti ambientali si basa sulle quantità definite dall'unità dichiarata moltiplicate per 50 km, rappresentando una distanza di riferimento come riportato nel report (JRC 2018).

C3 Trattamento dei rifiuti per riutilizzo, recupero e/o riciclo

In questa fase è stato incluso il trattamento della quota CDW destinata al riciclo. Lo scenario definito si basa sul rapporto ISPRA sui rifiuti, dal quale vengono riportate e utilizzate in questo studio i seguenti tassi di riciclaggio.

- L'81% del CDW viene riciclato alla fine della vita, come quantità post-consumo.

- Il 19% del prodotto finale va allo smaltimento finale (considerato in C4).

C4 Smaltimento finale

Questo modulo copre lo smaltimento finale in discarica della parte CDW non riciclata, segnandone la fine della vita. È stata conteggiata anche la carbonazione della frazione di cemento inviata in discarica.

D, Riutilizzo, recupero e potenziale di riciclo

I processi di riciclo e i flussi netti di materiali primari evitati relativi al massetto utilizzato come prodotto finale sono inclusi in questa fase. Si riferiscono a una tariffa del CDW demolito. Viene esclusa la quantità di MPS in ingresso.

6 Risultati di profilo ambientale

6.1 Impatti ambientali

6.2 BS20

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS20)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	2.09e+02	1.05e+01	1.46e+01	-4.85e+01	3.99e+00	1.85e+01	2.15e+01	-7.77e-01	-2.53e+00
GWP-fossil	kg CO ₂ eq.	2.05e+02	1.05e+01	1.46e+01	-4.85e+01	3.99e+00	1.85e+01	2.15e+01	-7.82e-01	-2.50e+00
GWP-biogenic	kg CO ₂ eq.	3.99e+00	7.28e-03	6.86e-02	0.00e+00	8.07e-04	1.28e-02	6.07e-02	4.24e-03	-3.02e-02
GWP-luluc	kg CO ₂ eq.	4.12e-02	3.53e-03	3.97e-03	0.00e+00	4.08e-04	6.22e-03	5.13e-03	3.87e-04	-1.30e-03
ODP	kg CFC-11 eq.	1.24e-06	2.28e-07	2.12e-07	0.00e+00	5.92e-08	4.03e-07	4.98e-07	7.39e-08	-4.24e-08
AP	mol H ⁺ eq.	5.28e-01	2.25e-02	1.74e-01	0.00e+00	3.56e-02	3.97e-02	1.75e-01	1.39e-02	-1.61e-02
EP-freshwater	kg P eq.	4.68e-03	7.79e-05	2.22e-04	0.00e+00	1.39e-05	1.38e-04	2.93e-04	1.18e-05	-3.79e-05
EP-marine	kg N eq.	1.98e-01	5.29e-03	7.96e-02	0.00e+00	1.66e-02	9.33e-03	6.25e-02	5.90e-03	-5.23e-03
EP-terrestrial	mol N eq.	1.86e+00	5.85e-02	8.50e-01	0.00e+00	1.82e-01	1.03e-01	6.83e-01	6.48e-02	-6.59e-02
POCP	kg NMVOC eq.	5.53e-01	3.57e-02	2.39e-01	0.00e+00	5.43e-02	6.30e-02	2.24e-01	2.43e-02	-1.87e-02
ADPE	kg Sb eq.	6.38e-04	3.68e-05	5.58e-05	0.00e+00	1.47e-06	6.50e-05	6.44e-05	2.65e-06	-2.46e-05
ADPF	MJ	1.13e+03	1.49e+02	1.86e+02	0.00e+00	5.19e+01	2.63e+02	3.74e+02	5.47e+01	-3.68e+01
WDP	m ³ World eq.	1.18e+02	7.90e-01	6.93e-01	0.00e+00	1.34e-01	1.39e+00	1.02e+01	2.55e+00	-5.99e+00
GWP-GHG	kg CO ₂ eq.	2.05e+02	1.05e+01	1.46e+01	0.00e+00	3.99e+00	1.85e+01	2.15e+01	2.08e+00	-2.51e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS20)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.41e-06	7.81e-07	3.40e-07	0.00e+00	1.02e-06	1.38e-06	1.57e-05	3.49e-07	-3.63e-07
IRP	kBq U235 eq.	5.26e+00	6.51e-02	4.71e-02	0.00e+00	8.63e-03	1.15e-01	6.55e-01	2.05e-02	-1.53e-01
ETP-fw	CTUe	2.35e+02	2.00e+01	2.16e+01	0.00e+00	2.82e+00	3.53e+01	1.13e+02	2.90e+00	-8.27e+00
HTP-c	CTUh	2.44e-08	1.76e-09	1.87e-09	0.00e+00	4.07e-10	3.11e-09	5.63e-09	2.67e-10	-1.02e-09
HTP-nc	CTUh	1.41e-06	9.39e-08	6.47e-08	0.00e+00	6.42e-09	1.66e-07	2.66e-07	7.54e-09	-2.93e-08
SQP	Dimensionless	4.09e+02	8.94e+01	1.50e+01	0.00e+00	3.45e+00	1.58e+02	4.82e+02	1.11e+02	-5.31e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS20)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.33e+01	2.46e+00	2.39e+00	0.00e+00	3.27e-01	4.33e+00	2.44e+01	1.11e+00	-7.09e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.33e+01	2.46e+00	2.39e+00	0.00e+00	3.27e-01	4.33e+00	2.44e+01	1.11e+00	-7.09e+00
PENRE	MJ	1.13e+03	1.49e+02	1.86e+02	0.00e+00	5.19e+01	2.63e+02	3.74e+02	5.47e+01	-3.68e+01
PENRM	MJ	8.53e-01	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.13e+03	1.49e+02	1.86e+02	0.00e+00	5.19e+01	2.63e+02	3.74e+02	5.47e+01	-3.68e+01
SM	kg	1.10e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.18e+00	3.42e-02	2.05e-02	0.00e+00	3.08e-03	6.03e-02	9.75e-02	5.29e-03	-1.92e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.73e+00	1.82e-02	1.26e-01	0.00e+00	3.33e-03	3.21e-02	-1.69e+00	6.24e-02	-1.38e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS20)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.29e+00	1.53e-01	2.95e-01	0.00e+00	4.63e-02	2.71e-01	4.07e-01	3.38e-02	-1.26e-01
NHWD	kg	2.12e+03	1.64e+00	1.19e+02	0.00e+00	3.41e-01	2.89e+00	0.00e+00	3.76e+02	-1.56e+00
RWD	kg	1.85e-03	4.43e-05	3.17e-05	0.00e+00	5.43e-06	7.82e-05	3.59e-04	1.18e-05	-8.34e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	3.95e+00	1.31e-01	1.36e-01	0.00e+00	2.45e-02	2.31e-01	1.60e+03	2.05e-02	-8.00e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.23e+00	2.90e-02	3.50e-02	0.00e+00	2.42e-03	5.12e-02	5.18e-01	1.22e-02	-1.17e-01
EET	MJ	2.19e+00	3.50e-02	2.46e-02	0.00e+00	1.15e-03	6.18e-02	1.84e-01	2.29e-03	-1.38e-02

6.3 BS25

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS25)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	2.17e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.81e-01	-2.57e+00
GWP-fossil	kg CO ₂ eq.	2.13e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.85e-01	-2.53e+00
GWP-biogenic	kg CO ₂ eq.	4.12e+00	7.32e-03	6.86e-02	0.00e+00	8.18e-04	1.30e-02	6.15e-02	4.30e-03	-3.06e-02
GWP-luluc	kg CO ₂ eq.	4.27e-02	3.55e-03	3.98e-03	0.00e+00	4.13e-04	6.30e-03	5.20e-03	3.92e-04	-1.32e-03
ODP	kg CFC-11 eq.	1.27e-06	2.30e-07	2.12e-07	0.00e+00	5.99e-08	4.08e-07	5.04e-07	7.48e-08	-4.29e-08
AP	mol H ⁺ eq.	5.46e-01	2.26e-02	1.74e-01	0.00e+00	3.61e-02	4.02e-02	1.77e-01	1.40e-02	-1.63e-02
EP-freshwater	kg P eq.	4.78e-03	7.84e-05	2.23e-04	0.00e+00	1.41e-05	1.39e-04	2.97e-04	1.20e-05	-3.84e-05
EP-marine	kg N eq.	2.03e-01	5.32e-03	7.96e-02	0.00e+00	1.68e-02	9.45e-03	6.33e-02	5.97e-03	-5.30e-03
EP-terrestrial	mol N eq.	1.92e+00	5.88e-02	8.50e-01	0.00e+00	1.84e-01	1.05e-01	6.92e-01	6.56e-02	-6.68e-02
POCP	kg NMVOC eq.	5.69e-01	3.59e-02	2.39e-01	0.00e+00	5.50e-02	6.38e-02	2.27e-01	2.46e-02	-1.90e-02
ADPE	kg Sb eq.	6.62e-04	3.70e-05	5.58e-05	0.00e+00	1.49e-06	6.58e-05	6.52e-05	2.69e-06	-2.49e-05
ADPF	MJ	1.16e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
WDP	m ³ World eq.	1.18e+02	7.94e-01	6.95e-01	0.00e+00	1.35e-01	1.41e+00	1.03e+01	2.58e+00	-6.06e+00
GWP-GHG	kg CO ₂ eq.	2.13e+02	1.05e+01	1.46e+01	0.00e+00	4.04e+00	1.87e+01	2.18e+01	2.11e+00	-2.54e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq.]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS25)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.52e-06	7.85e-07	3.40e-07	0.00e+00	1.03e-06	1.40e-06	1.59e-05	3.53e-07	-3.67e-07
IRP	kBq U235 eq.	5.34e+00	6.54e-02	4.77e-02	0.00e+00	8.74e-03	1.16e-01	6.63e-01	2.08e-02	-1.55e-01
ETP-fw	CTUe	2.40e+02	2.01e+01	2.16e+01	0.00e+00	2.85e+00	3.57e+01	1.14e+02	2.94e+00	-8.38e+00
HTP-c	CTUh	2.53e-08	1.77e-09	1.88e-09	0.00e+00	4.12e-10	3.15e-09	5.70e-09	2.70e-10	-1.03e-09
HTP-nc	CTUh	1.46e-06	9.44e-08	6.49e-08	0.00e+00	6.50e-09	1.68e-07	2.70e-07	7.64e-09	-2.97e-08
SQP	Dimensionless	4.17e+02	8.98e+01	1.50e+01	0.00e+00	3.49e+00	1.60e+02	4.88e+02	1.13e+02	-5.38e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS25)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.56e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.12e+00	-7.18e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.56e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.12e+00	-7.18e+00
PENRE	MJ	1.16e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
PENRM	MJ	8.53e-01	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.16e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
SM	kg	1.15e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.26e+00	3.43e-02	2.09e-02	0.00e+00	3.12e-03	6.10e-02	9.87e-02	5.36e-03	-1.95e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.74e+00	1.83e-02	1.41e-01	0.00e+00	3.37e-03	3.25e-02	-1.71e+00	6.32e-02	-1.40e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS25)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.33e+00	1.54e-01	2.95e-01	0.00e+00	4.69e-02	2.74e-01	4.12e-01	3.42e-02	-1.28e-01
NHWD	kg	2.12e+03	1.65e+00	1.19e+02	0.00e+00	3.45e-01	2.93e+00	0.00e+00	3.81e+02	-1.58e+00
RWD	kg	1.92e-03	4.46e-05	3.21e-05	0.00e+00	5.50e-06	7.92e-05	3.64e-04	1.20e-05	-8.44e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.08e+00	1.32e-01	1.37e-01	0.00e+00	2.48e-02	2.34e-01	1.62e+03	2.08e-02	-8.11e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.27e+00	2.92e-02	3.53e-02	0.00e+00	2.45e-03	5.18e-02	5.25e-01	1.24e-02	-1.18e-01
EET	MJ	2.29e+00	3.52e-02	2.46e-02	0.00e+00	1.16e-03	6.26e-02	1.86e-01	2.32e-03	-1.40e-02

6.4 BS30

Legend: Global Warming Potential total GWPT [kg CO2-Eq]; Global Warming Potential fossil fuels GWPF [kg CO2-Eq.]; Global Warming Potential biogenic GWPB [kg CO2-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO2-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H+ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m3 world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS30)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.18e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.80e-01	-2.57e+00
GWP-fossil	kg CO2 eq.	2.14e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.85e-01	-2.53e+00
GWP-biogenic	kg CO2 eq.	4.13e+00	7.32e-03	6.86e-02	0.00e+00	8.18e-04	1.30e-02	6.15e-02	4.30e-03	-3.06e-02
GWP-luluc	kg CO2 eq.	4.28e-02	3.55e-03	3.98e-03	0.00e+00	4.13e-04	6.30e-03	5.20e-03	3.92e-04	-1.32e-03
ODP	kg CFC-11 eq.	1.27e-06	2.30e-07	2.12e-07	0.00e+00	5.99e-08	4.08e-07	5.04e-07	7.48e-08	-4.29e-08
AP	mol H+ eq.	5.47e-01	2.26e-02	1.74e-01	0.00e+00	3.61e-02	4.02e-02	1.77e-01	1.40e-02	-1.63e-02
EP-freshwater	kg P eq.	4.78e-03	7.84e-05	2.23e-04	0.00e+00	1.41e-05	1.39e-04	2.97e-04	1.20e-05	-3.84e-05
EP-marine	kg N eq.	2.03e-01	5.32e-03	7.96e-02	0.00e+00	1.68e-02	9.45e-03	6.33e-02	5.97e-03	-5.30e-03
EP-terrestrial	mol N eq.	1.92e+00	5.88e-02	8.50e-01	0.00e+00	1.84e-01	1.05e-01	6.92e-01	6.56e-02	-6.68e-02
POCP	kg NMVOC eq.	5.70e-01	3.59e-02	2.39e-01	0.00e+00	5.50e-02	6.38e-02	2.27e-01	2.46e-02	-1.90e-02
ADPE	kg Sb eq.	6.62e-04	3.70e-05	5.58e-05	0.00e+00	1.49e-06	6.58e-05	6.52e-05	2.69e-06	-2.49e-05
ADPF	MJ	1.17e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
WDP	m3 World eq.	1.19e+02	7.94e-01	6.95e-01	0.00e+00	1.36e-01	1.41e+00	1.03e+01	2.58e+00	-6.06e+00
GWP-GHG	kg CO2 eq.	2.13e+02	1.05e+01	1.46e+01	0.00e+00	4.04e+00	1.87e+01	2.18e+01	2.11e+00	-2.54e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS30)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.53e-06	7.86e-07	3.40e-07	0.00e+00	1.03e-06	1.40e-06	1.59e-05	3.53e-07	-3.67e-07
IRP	kBq U235 eq.	6.93e+00	6.54e-02	4.77e-02	0.00e+00	8.74e-03	1.16e-01	6.63e-01	2.08e-02	-1.55e-01
ETP-fw	CTUe	2.40e+02	2.01e+01	2.16e+01	0.00e+00	2.85e+00	3.57e+01	1.14e+02	2.94e+00	-8.38e+00
HTP-c	CTUh	2.53e-08	1.77e-09	1.88e-09	0.00e+00	4.12e-10	3.15e-09	5.71e-09	2.70e-10	-1.03e-09
HTP-nc	CTUh	1.47e-06	9.44e-08	6.49e-08	0.00e+00	6.50e-09	1.68e-07	2.70e-07	7.64e-09	-2.97e-08
SQP	Dimensionless	4.18e+02	8.98e+01	1.50e+01	0.00e+00	3.49e+00	1.60e+02	4.88e+02	1.13e+02	-5.38e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS30)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.60e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.60e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PENRE	MJ	1.17e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
PENRM	MJ	1.28e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.17e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
SM	kg	1.15e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.26e+00	3.43e-02	2.09e-02	0.00e+00	3.12e-03	6.10e-02	9.87e-02	5.36e-03	-1.95e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.75e+00	1.83e-02	1.41e-01	0.00e+00	3.37e-03	3.25e-02	-1.71e+00	6.32e-02	-1.40e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS30)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.33e+00	1.54e-01	2.95e-01	0.00e+00	4.69e-02	2.74e-01	4.12e-01	3.42e-02	-1.28e-01
NHWD	kg	2.12e+03	1.65e+00	1.19e+02	0.00e+00	3.45e-01	2.93e+00	0.00e+00	3.81e+02	-1.58e+00
RWD	kg	2.02e-03	4.46e-05	3.21e-05	0.00e+00	5.50e-06	7.92e-05	3.64e-04	1.20e-05	-8.44e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.08e+00	1.32e-01	1.37e-01	0.00e+00	2.48e-02	2.34e-01	1.62e+03	2.08e-02	-8.11e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.27e+00	2.92e-02	3.53e-02	0.00e+00	2.45e-03	5.18e-02	5.25e-01	1.24e-02	-1.18e-01
EET	MJ	2.29e+00	3.52e-02	2.46e-02	0.00e+00	1.16e-03	6.26e-02	1.86e-01	2.32e-03	-1.40e-02

6.5 BS30R-7

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS30R-7)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.20e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.79e-01	-2.57e+00
GWP-fossil	kg CO2 eq.	2.15e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.84e-01	-2.54e+00
GWP-biogenic	kg CO2 eq.	4.16e+00	7.32e-03	6.86e-02	0.00e+00	8.18e-04	1.30e-02	6.15e-02	4.30e-03	-3.06e-02
GWP-luluc	kg CO2 eq.	4.32e-02	3.55e-03	3.98e-03	0.00e+00	4.13e-04	6.31e-03	5.20e-03	3.92e-04	-1.32e-03
ODP	kg CFC-11 eq.	1.28e-06	2.30e-07	2.12e-07	0.00e+00	6.00e-08	4.08e-07	5.04e-07	7.48e-08	-4.29e-08
AP	mol H+ eq.	5.50e-01	2.26e-02	1.74e-01	0.00e+00	3.61e-02	4.02e-02	1.77e-01	1.40e-02	-1.63e-02
EP-freshwater	kg P eq.	4.78e-03	7.84e-05	2.23e-04	0.00e+00	1.41e-05	1.39e-04	2.97e-04	1.20e-05	-3.84e-05
EP-marine	kg N eq.	2.04e-01	5.32e-03	7.96e-02	0.00e+00	1.68e-02	9.45e-03	6.33e-02	5.98e-03	-5.30e-03
EP-terrestrial	mol N eq.	1.93e+00	5.88e-02	8.50e-01	0.00e+00	1.84e-01	1.05e-01	6.92e-01	6.56e-02	-6.68e-02
POCP	kg NMVOC eq.	5.73e-01	3.59e-02	2.39e-01	0.00e+00	5.51e-02	6.38e-02	2.27e-01	2.46e-02	-1.90e-02
ADPE	kg Sb eq.	6.64e-04	3.70e-05	5.58e-05	0.00e+00	1.49e-06	6.58e-05	6.53e-05	2.69e-06	-2.49e-05
ADPF	MJ	1.21e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.55e+01	-3.73e+01
WDP	m3 World eq.	1.19e+02	7.94e-01	6.95e-01	0.00e+00	1.36e-01	1.41e+00	1.03e+01	2.58e+00	-6.07e+00
GWP-GHG	kg CO2 eq.	2.13e+02	1.05e+01	1.46e+01	0.00e+00	4.04e+00	1.87e+01	2.18e+01	2.11e+00	-2.54e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS30R-7)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.54e-06	7.86e-07	3.40e-07	0.00e+00	1.03e-06	1.40e-06	1.59e-05	3.53e-07	-3.68e-07
IRP	kBq U235 eq.	1.33e+01	6.55e-02	4.77e-02	0.00e+00	8.75e-03	1.16e-01	6.64e-01	2.08e-02	-1.55e-01
ETP-fw	CTUe	2.40e+02	2.01e+01	2.16e+01	0.00e+00	2.85e+00	3.57e+01	1.14e+02	2.94e+00	-8.38e+00
HTP-c	CTUh	2.54e-08	1.77e-09	1.88e-09	0.00e+00	4.12e-10	3.15e-09	5.71e-09	2.70e-10	-1.03e-09
HTP-nc	CTUh	1.47e-06	9.44e-08	6.49e-08	0.00e+00	6.50e-09	1.68e-07	2.70e-07	7.64e-09	-2.97e-08
SQP	Dimensionless	4.19e+02	8.99e+01	1.50e+01	0.00e+00	3.49e+00	1.60e+02	4.89e+02	1.13e+02	-5.38e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS30R-7)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.74e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.74e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PENRE	MJ	1.21e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.55e+01	-3.73e+01
PENRM	MJ	2.98e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.21e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.55e+01	-3.73e+01
SM	kg	1.15e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.26e+00	3.44e-02	2.09e-02	0.00e+00	3.13e-03	6.11e-02	9.88e-02	5.36e-03	-1.95e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.75e+00	1.83e-02	1.41e-01	0.00e+00	3.37e-03	3.26e-02	-1.71e+00	6.33e-02	-1.40e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS30R-7)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.33e+00	1.54e-01	2.95e-01	0.00e+00	4.69e-02	2.74e-01	4.13e-01	3.42e-02	-1.28e-01
NHWD	kg	2.12e+03	1.65e+00	1.19e+02	0.00e+00	3.45e-01	2.93e+00	0.00e+00	3.81e+02	-1.58e+00
RWD	kg	2.45e-03	4.46e-05	3.21e-05	0.00e+00	5.50e-06	7.93e-05	3.64e-04	1.20e-05	-8.45e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.08e+00	1.32e-01	1.37e-01	0.00e+00	2.48e-02	2.34e-01	1.63e+03	2.08e-02	-8.11e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.27e+00	2.92e-02	3.53e-02	0.00e+00	2.45e-03	5.19e-02	5.25e-01	1.24e-02	-1.19e-01
EET	MJ	2.29e+00	3.52e-02	2.46e-02	0.00e+00	1.16e-03	6.26e-02	1.86e-01	2.32e-03	-1.40e-02

6.6 BS30R-14

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS30R-14)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.19e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.80e-01	-2.57e+00
GWP-fossil	kg CO2 eq.	2.15e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.85e-01	-2.53e+00
GWP-biogenic	kg CO2 eq.	4.15e+00	7.32e-03	6.86e-02	0.00e+00	8.18e-04	1.30e-02	6.15e-02	4.30e-03	-3.06e-02
GWP-luluc	kg CO2 eq.	4.30e-02	3.55e-03	3.98e-03	0.00e+00	4.13e-04	6.30e-03	5.20e-03	3.92e-04	-1.32e-03
ODP	kg CFC-11 eq.	1.28e-06	2.30e-07	2.12e-07	0.00e+00	5.99e-08	4.08e-07	5.04e-07	7.48e-08	-4.29e-08
AP	mol H+ eq.	5.48e-01	2.26e-02	1.74e-01	0.00e+00	3.61e-02	4.02e-02	1.77e-01	1.40e-02	-1.63e-02
EP-freshwater	kg P eq.	4.78e-03	7.84e-05	2.23e-04	0.00e+00	1.41e-05	1.39e-04	2.97e-04	1.20e-05	-3.84e-05
EP-marine	kg N eq.	2.03e-01	5.32e-03	7.96e-02	0.00e+00	1.68e-02	9.45e-03	6.33e-02	5.97e-03	-5.30e-03
EP-terrestrial	mol N eq.	1.92e+00	5.88e-02	8.50e-01	0.00e+00	1.84e-01	1.05e-01	6.92e-01	6.56e-02	-6.68e-02
POCP	kg NMVOC eq.	5.72e-01	3.59e-02	2.39e-01	0.00e+00	5.50e-02	6.38e-02	2.27e-01	2.46e-02	-1.90e-02
ADPE	kg Sb eq.	6.63e-04	3.70e-05	5.58e-05	0.00e+00	1.49e-06	6.58e-05	6.52e-05	2.69e-06	-2.49e-05
ADPF	MJ	1.19e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
WDP	m3 World eq.	1.19e+02	7.94e-01	6.95e-01	0.00e+00	1.36e-01	1.41e+00	1.03e+01	2.58e+00	-6.07e+00
GWP-GHG	kg CO2 eq.	2.13e+02	1.05e+01	1.46e+01	0.00e+00	4.04e+00	1.87e+01	2.18e+01	2.11e+00	-2.54e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS30R-14)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.53e-06	7.86e-07	3.40e-07	0.00e+00	1.03e-06	1.40e-06	1.59e-05	3.53e-07	-3.68e-07
IRP	kBq U235 eq.	1.01e+01	6.54e-02	4.77e-02	0.00e+00	8.74e-03	1.16e-01	6.64e-01	2.08e-02	-1.55e-01
ETP-fw	CTUe	2.40e+02	2.01e+01	2.16e+01	0.00e+00	2.85e+00	3.57e+01	1.14e+02	2.94e+00	-8.38e+00
HTP-c	CTUh	2.53e-08	1.77e-09	1.88e-09	0.00e+00	4.12e-10	3.15e-09	5.71e-09	2.70e-10	-1.03e-09
HTP-nc	CTUh	1.47e-06	9.44e-08	6.49e-08	0.00e+00	6.50e-09	1.68e-07	2.70e-07	7.64e-09	-2.97e-08
SQP	Dimensionless	4.18e+02	8.99e+01	1.50e+01	0.00e+00	3.49e+00	1.60e+02	4.89e+02	1.13e+02	-5.38e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS30R-14)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.67e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.67e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PENRE	MJ	1.19e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
PENRM	MJ	2.13e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.19e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
SM	kg	1.15e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.26e+00	3.43e-02	2.09e-02	0.00e+00	3.13e-03	6.10e-02	9.88e-02	5.36e-03	-1.95e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.75e+00	1.83e-02	1.41e-01	0.00e+00	3.37e-03	3.26e-02	-1.71e+00	6.32e-02	-1.40e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS30R-14)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.33e+00	1.54e-01	2.95e-01	0.00e+00	4.69e-02	2.74e-01	4.13e-01	3.42e-02	-1.28e-01
NHWD	kg	2.12e+03	1.65e+00	1.19e+02	0.00e+00	3.45e-01	2.93e+00	0.00e+00	3.81e+02	-1.58e+00
RWD	kg	2.24e-03	4.46e-05	3.21e-05	0.00e+00	5.50e-06	7.93e-05	3.64e-04	1.20e-05	-8.44e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.08e+00	1.32e-01	1.37e-01	0.00e+00	2.48e-02	2.34e-01	1.63e+03	2.08e-02	-8.11e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.27e+00	2.92e-02	3.53e-02	0.00e+00	2.45e-03	5.19e-02	5.25e-01	1.24e-02	-1.18e-01
EET	MJ	2.29e+00	3.52e-02	2.46e-02	0.00e+00	1.16e-03	6.26e-02	1.86e-01	2.32e-03	-1.40e-02

6.7 BS30R-21

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatori) (BS30R-21)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.18e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.80e-01	-2.57e+00
GWP-fossil	kg CO2 eq.	2.14e+02	1.05e+01	1.46e+01	-5.12e+01	4.04e+00	1.87e+01	2.18e+01	-7.85e-01	-2.53e+00
GWP-biogenic	kg CO2 eq.	4.14e+00	7.32e-03	6.86e-02	0.00e+00	8.18e-04	1.30e-02	6.15e-02	4.30e-03	-3.06e-02
GWP-luluc	kg CO2 eq.	4.29e-02	3.55e-03	3.98e-03	0.00e+00	4.13e-04	6.30e-03	5.20e-03	3.92e-04	-1.32e-03
ODP	kg CFC-11 eq.	1.28e-06	2.30e-07	2.12e-07	0.00e+00	5.99e-08	4.08e-07	5.04e-07	7.48e-08	-4.29e-08
AP	mol H+ eq.	5.47e-01	2.26e-02	1.74e-01	0.00e+00	3.61e-02	4.02e-02	1.77e-01	1.40e-02	-1.63e-02
EP-freshwater	kg P eq.	4.78e-03	7.84e-05	2.23e-04	0.00e+00	1.41e-05	1.39e-04	2.97e-04	1.20e-05	-3.84e-05
EP-marine	kg N eq.	2.03e-01	5.32e-03	7.96e-02	0.00e+00	1.68e-02	9.45e-03	6.33e-02	5.97e-03	-5.30e-03
EP-terrestrial	mol N eq.	1.92e+00	5.88e-02	8.50e-01	0.00e+00	1.84e-01	1.05e-01	6.92e-01	6.56e-02	-6.68e-02
POCP	kg NMVOC eq.	5.71e-01	3.59e-02	2.39e-01	0.00e+00	5.50e-02	6.38e-02	2.27e-01	2.46e-02	-1.90e-02
ADPE	kg Sb eq.	6.63e-04	3.70e-05	5.58e-05	0.00e+00	1.49e-06	6.58e-05	6.52e-05	2.69e-06	-2.49e-05
ADPF	MJ	1.18e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
WDP	m3 World eq.	1.19e+02	7.94e-01	6.95e-01	0.00e+00	1.36e-01	1.41e+00	1.03e+01	2.58e+00	-6.07e+00
GWP-GHG	kg CO2 eq.	2.13e+02	1.05e+01	1.46e+01	0.00e+00	4.04e+00	1.87e+01	2.18e+01	2.11e+00	-2.54e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS30R-21)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	4.53e-06	7.86e-07	3.40e-07	0.00e+00	1.03e-06	1.40e-06	1.59e-05	3.53e-07	-3.68e-07
IRP	kBq U235 eq.	8.52e+00	6.54e-02	4.77e-02	0.00e+00	8.74e-03	1.16e-01	6.63e-01	2.08e-02	-1.55e-01
ETP-fw	CTUe	2.40e+02	2.01e+01	2.16e+01	0.00e+00	2.85e+00	3.57e+01	1.14e+02	2.94e+00	-8.38e+00
HTP-c	CTUh	2.53e-08	1.77e-09	1.88e-09	0.00e+00	4.12e-10	3.15e-09	5.71e-09	2.70e-10	-1.03e-09
HTP-nc	CTUh	1.47e-06	9.44e-08	6.49e-08	0.00e+00	6.50e-09	1.68e-07	2.70e-07	7.64e-09	-2.97e-08
SQP	Dimensionless	4.18e+02	8.99e+01	1.50e+01	0.00e+00	3.49e+00	1.60e+02	4.89e+02	1.13e+02	-5.38e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS30R-21)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	7.63e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	7.63e+01	2.47e+00	2.40e+00	0.00e+00	3.31e-01	4.39e+00	2.48e+01	1.13e+00	-7.18e+00
PENRE	MJ	1.18e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
PENRM	MJ	1.71e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.18e+03	1.50e+02	1.86e+02	0.00e+00	5.26e+01	2.66e+02	3.79e+02	5.54e+01	-3.73e+01
SM	kg	1.15e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.26e+00	3.43e-02	2.09e-02	0.00e+00	3.12e-03	6.10e-02	9.87e-02	5.36e-03	-1.95e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.75e+00	1.83e-02	1.41e-01	0.00e+00	3.37e-03	3.25e-02	-1.71e+00	6.32e-02	-1.40e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS30R-21)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.33e+00	1.54e-01	2.95e-01	0.00e+00	4.69e-02	2.74e-01	4.13e-01	3.42e-02	-1.28e-01
NHWD	kg	2.12e+03	1.65e+00	1.19e+02	0.00e+00	3.45e-01	2.93e+00	0.00e+00	3.81e+02	-1.58e+00
RWD	kg	2.13e-03	4.46e-05	3.21e-05	0.00e+00	5.50e-06	7.93e-05	3.64e-04	1.20e-05	-8.44e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.08e+00	1.32e-01	1.37e-01	0.00e+00	2.48e-02	2.34e-01	1.62e+03	2.08e-02	-8.11e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.27e+00	2.92e-02	3.53e-02	0.00e+00	2.45e-03	5.19e-02	5.25e-01	1.24e-02	-1.18e-01
EET	MJ	2.29e+00	3.52e-02	2.46e-02	0.00e+00	1.16e-03	6.26e-02	1.86e-01	2.32e-03	-1.40e-02

6.8 BS40HR

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatori) (BS40HR)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.70e+02	1.09e+01	1.47e+01	-6.78e+01	4.21e+00	1.95e+01	2.28e+01	-8.34e-01	-2.67e+00
GWP-fossil	kg CO2 eq.	2.65e+02	1.09e+01	1.46e+01	-6.78e+01	4.21e+00	1.95e+01	2.27e+01	-8.38e-01	-2.64e+00
GWP-biogenic	kg CO2 eq.	4.97e+00	7.56e-03	6.88e-02	0.00e+00	8.53e-04	1.36e-02	6.41e-02	4.48e-03	-3.19e-02
GWP-luluc	kg CO2 eq.	5.22e-02	3.66e-03	4.00e-03	0.00e+00	4.31e-04	6.57e-03	5.42e-03	4.09e-04	-1.38e-03
ODP	kg CFC-11 eq.	1.50e-06	2.37e-07	2.12e-07	0.00e+00	6.25e-08	4.26e-07	5.26e-07	7.80e-08	-4.47e-08
AP	mol H+ eq.	6.55e-01	2.33e-02	1.74e-01	0.00e+00	3.76e-02	4.19e-02	1.85e-01	1.46e-02	-1.70e-02
EP-freshwater	kg P eq.	5.37e-03	8.09e-05	2.23e-04	0.00e+00	1.47e-05	1.45e-04	3.10e-04	1.25e-05	-4.00e-05
EP-marine	kg N eq.	2.33e-01	5.49e-03	7.96e-02	0.00e+00	1.75e-02	9.86e-03	6.60e-02	6.23e-03	-5.53e-03
EP-terrestrial	mol N eq.	2.27e+00	6.07e-02	8.50e-01	0.00e+00	1.92e-01	1.09e-01	7.22e-01	6.84e-02	-6.96e-02
POCP	kg NMVOC eq.	6.71e-01	3.70e-02	2.39e-01	0.00e+00	5.74e-02	6.65e-02	2.37e-01	2.56e-02	-1.98e-02
ADPE	kg Sb eq.	8.08e-04	3.82e-05	5.59e-05	0.00e+00	1.55e-06	6.86e-05	6.80e-05	2.80e-06	-2.59e-05
ADPF	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
WDP	m3 World eq.	1.23e+02	8.20e-01	6.99e-01	0.00e+00	1.41e-01	1.47e+00	1.08e+01	2.69e+00	-6.32e+00
GWP-GHG	kg CO2 eq.	2.62e+02	1.09e+01	1.46e+01	0.00e+00	4.21e+00	1.95e+01	2.27e+01	2.20e+00	-2.65e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS40HR)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	5.23e-06	8.11e-07	3.41e-07	0.00e+00	1.07e-06	1.46e-06	1.66e-05	3.68e-07	-3.83e-07
IRP	kBq U235 eq.	1.54e+01	6.76e-02	4.85e-02	0.00e+00	9.12e-03	1.21e-01	6.92e-01	2.16e-02	-1.62e-01
ETP-fw	CTUe	2.68e+02	2.07e+01	2.16e+01	0.00e+00	2.97e+00	3.72e+01	1.19e+02	3.07e+00	-8.73e+00
HTP-c	CTUh	3.06e-08	1.83e-09	1.89e-09	0.00e+00	4.30e-10	3.28e-09	5.95e-09	2.82e-10	-1.07e-09
HTP-nc	CTUh	1.77e-06	9.75e-08	6.54e-08	0.00e+00	6.78e-09	1.75e-07	2.81e-07	7.97e-09	-3.09e-08
SQP	Dimensionless	4.71e+02	9.28e+01	1.50e+01	0.00e+00	3.64e+00	1.67e+02	5.09e+02	1.18e+02	-5.61e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS40HR)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	9.18e+01	2.55e+00	2.43e+00	0.00e+00	3.45e-01	4.58e+00	2.58e+01	1.17e+00	-7.48e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	9.18e+01	2.55e+00	2.43e+00	0.00e+00	3.45e-01	4.58e+00	2.58e+01	1.17e+00	-7.48e+00
PENRE	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
PENRM	MJ	3.41e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
SM	kg	1.45e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.69e+00	3.55e-02	2.17e-02	0.00e+00	3.26e-03	6.37e-02	1.03e-01	5.59e-03	-2.03e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.85e+00	1.89e-02	1.66e-01	0.00e+00	3.51e-03	3.39e-02	-1.79e+00	6.59e-02	-1.46e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS40HR)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.54e+00	1.59e-01	2.96e-01	0.00e+00	4.89e-02	2.86e-01	4.30e-01	3.57e-02	-1.33e-01
NHWD	kg	2.12e+03	1.70e+00	1.19e+02	0.00e+00	3.60e-01	3.05e+00	0.00e+00	3.97e+02	-1.65e+00
RWD	kg	2.95e-03	4.60e-05	3.28e-05	0.00e+00	5.74e-06	8.27e-05	3.79e-04	1.25e-05	-8.80e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.84e+00	1.36e-01	1.39e-01	0.00e+00	2.59e-02	2.44e-01	1.69e+03	2.17e-02	-8.45e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.53e+00	3.01e-02	3.58e-02	0.00e+00	2.55e-03	5.41e-02	5.48e-01	1.29e-02	-1.23e-01
EET	MJ	2.87e+00	3.64e-02	2.46e-02	0.00e+00	1.21e-03	6.53e-02	1.94e-01	2.42e-03	-1.46e-02

6.9 BS40THINN

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatorii) (BS40THINN)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.70e+02	1.09e+01	1.47e+01	-6.78e+01	4.21e+00	1.95e+01	2.28e+01	-8.34e-01	-2.67e+00
GWP-fossil	kg CO2 eq.	2.65e+02	1.09e+01	1.46e+01	-6.78e+01	4.21e+00	1.95e+01	2.27e+01	-8.38e-01	-2.64e+00
GWP-biogenic	kg CO2 eq.	4.97e+00	7.56e-03	6.88e-02	0.00e+00	8.53e-04	1.36e-02	6.41e-02	4.48e-03	-3.19e-02
GWP-luluc	kg CO2 eq.	5.22e-02	3.66e-03	4.00e-03	0.00e+00	4.31e-04	6.57e-03	5.42e-03	4.09e-04	-1.38e-03
ODP	kg CFC-11 eq.	1.50e-06	2.37e-07	2.12e-07	0.00e+00	6.25e-08	4.26e-07	5.26e-07	7.80e-08	-4.47e-08
AP	mol H+ eq.	6.55e-01	2.33e-02	1.74e-01	0.00e+00	3.76e-02	4.19e-02	1.85e-01	1.46e-02	-1.70e-02
EP-freshwater	kg P eq.	5.37e-03	8.09e-05	2.23e-04	0.00e+00	1.47e-05	1.45e-04	3.10e-04	1.25e-05	-4.00e-05
EP-marine	kg N eq.	2.33e-01	5.49e-03	7.96e-02	0.00e+00	1.75e-02	9.86e-03	6.60e-02	6.23e-03	-5.53e-03
EP-terrestrial	mol N eq.	2.27e+00	6.07e-02	8.50e-01	0.00e+00	1.92e-01	1.09e-01	7.22e-01	6.84e-02	-6.96e-02
POCP	kg NMVOC eq.	6.71e-01	3.70e-02	2.39e-01	0.00e+00	5.74e-02	6.65e-02	2.37e-01	2.56e-02	-1.98e-02
ADPE	kg Sb eq.	8.08e-04	3.82e-05	5.59e-05	0.00e+00	1.55e-06	6.86e-05	6.80e-05	2.80e-06	-2.59e-05
ADPF	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
WDP	m3 World eq.	1.23e+02	8.20e-01	6.99e-01	0.00e+00	1.41e-01	1.47e+00	1.08e+01	2.69e+00	-6.32e+00
GWP-GHG	kg CO2 eq.	2.62e+02	1.09e+01	1.46e+01	0.00e+00	4.21e+00	1.95e+01	2.27e+01	2.20e+00	-2.65e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS40THINN)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	5.23e-06	8.11e-07	3.41e-07	0.00e+00	1.07e-06	1.46e-06	1.66e-05	3.68e-07	-3.83e-07
IRP	kBq U235 eq.	1.54e+01	6.76e-02	4.85e-02	0.00e+00	9.12e-03	1.21e-01	6.92e-01	2.16e-02	-1.62e-01
ETP-fw	CTUe	2.68e+02	2.07e+01	2.16e+01	0.00e+00	2.97e+00	3.72e+01	1.19e+02	3.07e+00	-8.73e+00
HTP-c	CTUh	3.06e-08	1.83e-09	1.89e-09	0.00e+00	4.30e-10	3.28e-09	5.95e-09	2.82e-10	-1.07e-09
HTP-nc	CTUh	1.77e-06	9.75e-08	6.54e-08	0.00e+00	6.78e-09	1.75e-07	2.81e-07	7.97e-09	-3.09e-08
SQP	Dimensionless	4.71e+02	9.28e+01	1.50e+01	0.00e+00	3.64e+00	1.67e+02	5.09e+02	1.18e+02	-5.61e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS40THINN)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	9.18e+01	2.55e+00	2.43e+00	0.00e+00	3.45e-01	4.58e+00	2.58e+01	1.17e+00	-7.48e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	9.18e+01	2.55e+00	2.43e+00	0.00e+00	3.45e-01	4.58e+00	2.58e+01	1.17e+00	-7.48e+00
PENRE	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
PENRM	MJ	3.41e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.43e+03	1.55e+02	1.87e+02	0.00e+00	5.48e+01	2.77e+02	3.95e+02	5.78e+01	-3.89e+01
SM	kg	1.45e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	2.69e+00	3.55e-02	2.17e-02	0.00e+00	3.26e-03	6.37e-02	1.03e-01	5.59e-03	-2.03e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.85e+00	1.89e-02	1.66e-01	0.00e+00	3.51e-03	3.39e-02	-1.79e+00	6.59e-02	-1.46e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS40THINN)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.54e+00	1.59e-01	2.96e-01	0.00e+00	4.89e-02	2.86e-01	4.30e-01	3.57e-02	-1.33e-01
NHWD	kg	2.12e+03	1.70e+00	1.19e+02	0.00e+00	3.60e-01	3.05e+00	0.00e+00	3.97e+02	-1.65e+00
RWD	kg	2.95e-03	4.60e-05	3.28e-05	0.00e+00	5.74e-06	8.27e-05	3.79e-04	1.25e-05	-8.80e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	4.84e+00	1.36e-01	1.39e-01	0.00e+00	2.59e-02	2.44e-01	1.69e+03	2.17e-02	-8.45e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.53e+00	3.01e-02	3.58e-02	0.00e+00	2.55e-03	5.41e-02	5.48e-01	1.29e-02	-1.23e-01
EET	MJ	2.87e+00	3.64e-02	2.46e-02	0.00e+00	1.21e-03	6.53e-02	1.94e-01	2.42e-03	-1.46e-02

6.10 BS40THINN + Agent

Legend: Global Warming Potential total GWPT [kg CO₂-Eq.]; Global Warming Potential fossil fuels GWPF [kg CO₂-Eq.]; Global Warming Potential biogenic GWPB [kg CO₂-Eq.]; Global Warming Potential land use and land use change GWPL [kg CO₂-Eq.]; Depletion potential of the stratospheric ozone layer ODP [kg CFC11-Eq.]; Acidification potential, Accumulated Exceedance AP [mol H⁺ Eq.]; Eutrophical potential, fraction of nutrients reaching freshwater end compartment EPF [kg (P) Eq.]; Eutrophical potential, fraction of nutrients reaching marine end compartment (EP-marine) EPM [kg N Eq.]; Eutrophical potential, Accumulated Exceedance (EP-terrestrial) EPT [mol N Eq.]; Formation potential of tropospheric ozone photochemical oxidants POCP [kg NMVOC Eq.]; Abiotic depletion potential for non-fossil resources ADPE [kg Sb-Eq.]; Abiotic depletion potential for fossil resources ADPF [MJ, net calorific value]; Water (user) deprivation potential, deprivation-weighted water consumption WDP [m³ world eq. Deprived].

Disclaimer: ADPE, ADPF and WDP are subject to Disclaimer 2: the results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (obbligatori) (BS40THINN + Agent)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	2.83e+02	1.09e+01	1.47e+01	-6.78e+01	4.23e+00	1.96e+01	2.28e+01	-8.25e-01	-2.69e+00
GWP-fossil	kg CO2 eq.	2.78e+02	1.09e+01	1.46e+01	-6.78e+01	4.23e+00	1.96e+01	2.28e+01	-8.30e-01	-2.65e+00
GWP-biogenic	kg CO2 eq.	5.05e+00	7.59e-03	6.88e-02	0.00e+00	8.56e-04	1.36e-02	6.44e-02	4.50e-03	-3.20e-02
GWP-luluc	kg CO2 eq.	5.75e-02	3.68e-03	4.00e-03	0.00e+00	4.32e-04	6.60e-03	5.44e-03	4.11e-04	-1.38e-03
ODP	kg CFC-11 eq.	1.77e-06	2.38e-07	2.12e-07	0.00e+00	6.27e-08	4.27e-07	5.28e-07	7.83e-08	-4.49e-08
AP	mol H+ eq.	6.79e-01	2.34e-02	1.74e-01	0.00e+00	3.78e-02	4.21e-02	1.85e-01	1.47e-02	-1.71e-02
EP-freshwater	kg P eq.	5.63e-03	8.13e-05	2.23e-04	0.00e+00	1.48e-05	1.46e-04	3.11e-04	1.26e-05	-4.02e-05
EP-marine	kg N eq.	2.38e-01	5.51e-03	7.96e-02	0.00e+00	1.76e-02	9.89e-03	6.62e-02	6.25e-03	-5.55e-03
EP-terrestrial	mol N eq.	2.32e+00	6.10e-02	8.50e-01	0.00e+00	1.93e-01	1.09e-01	7.24e-01	6.87e-02	-6.99e-02
POCP	kg NMVOC eq.	7.02e-01	3.72e-02	2.39e-01	0.00e+00	5.76e-02	6.68e-02	2.38e-01	2.57e-02	-1.99e-02
ADPE	kg Sb eq.	8.98e-04	3.84e-05	5.59e-05	0.00e+00	1.56e-06	6.89e-05	6.83e-05	2.81e-06	-2.60e-05
ADPF	MJ	1.57e+03	1.55e+02	1.87e+02	0.00e+00	5.51e+01	2.78e+02	3.97e+02	5.80e+01	-3.90e+01
WDP	m3 World eq.	1.25e+02	8.23e-01	6.99e-01	0.00e+00	1.42e-01	1.48e+00	1.08e+01	2.70e+00	-6.35e+00
GWP-GHG	kg CO2 eq.	2.75e+02	1.09e+01	1.46e+01	0.00e+00	4.23e+00	1.96e+01	2.28e+01	2.21e+00	-2.66e+00

Legend: Potential incidence of disease due to PM emissions PMF [Disease incidence]; Potential Human exposure efficiency relative to UR25 IRH [kBq U235 eq]; Potential Comparative Toxic unit for ecosystems (ETP-fw) ETPF [CTUe]; Potential Comparative Toxic unit for human (HTP-c) HTC [CTUh]; Potential Comparative Toxic unit for human (HTPnc) HTNC [CTUh]; Potential soil quality index (SQP) LULUC [Dimensionless].

IRP is subject to Disclaimer 1: This impact category primarily concerns the possible impact of low dose ionizing radiation on human health from the nuclear fuel cycle. It does not take into account the effects due to possible nuclear accidents, occupational exposure or the disposal of radioactive waste in underground facilities. Potential ionizing radiation from soil, radon and some building materials is not measured by this indicator.

ETPF, HTC, HTNC, LULUC are subject to Disclaimer 2: The results of this environmental impact indicator should be used with caution given that the uncertainties of these results are high or because there is limited experience with the indicator.

Impatti ambientali (opzionali) (BS40THINN + Agent)

Indicatori di impatto	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PM	Disease incidence	5.42e-06	8.14e-07	3.41e-07	0.00e+00	1.08e-06	1.46e-06	1.66e-05	3.70e-07	-3.85e-07
IRP	kBq U235 eq.	1.57e+01	6.78e-02	4.85e-02	0.00e+00	9.15e-03	1.22e-01	6.95e-01	2.17e-02	-1.62e-01
ETP-fw	CTUe	6.71e+02	2.08e+01	2.16e+01	0.00e+00	2.99e+00	3.74e+01	1.19e+02	3.08e+00	-8.77e+00
HTP-c	CTUh	4.99e-08	1.84e-09	1.89e-09	0.00e+00	4.31e-10	3.29e-09	5.97e-09	2.83e-10	-1.08e-09
HTP-nc	CTUh	1.82e-06	9.79e-08	6.54e-08	0.00e+00	6.80e-09	1.76e-07	2.82e-07	8.00e-09	-3.11e-08
SQP	Dimensionless	4.93e+02	9.31e+01	1.50e+01	0.00e+00	3.65e+00	1.67e+02	5.11e+02	1.18e+02	-5.63e+01

Legend: Use of renewable primary energy excluding renewable primary energy resources used as raw materials PERE [MJ]; Use of renewable primary energy resources used as raw materials (PERM) PERM [MJ]; Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PERT) PERT [MJ]; Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (PENRE) PENRE [MJ]; Use of non-renewable primary energy resources used as raw materials (PENRM) PENRM [MJ]; Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) (PENRT) PENRT [MJ]; Use of secondary material (SM) SM [kg]; Use of renewable secondary fuels [RSF] RSF [MJ]; Use of non-renewable secondary fuels [NRSF] NRSF [MJ]; Net use of fresh water [FW] FW [m³].

Uso delle risorse (BS40THINN + Agent)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
PERE	MJ	1.02e+02	2.56e+00	2.43e+00	0.00e+00	3.46e-01	4.60e+00	2.59e+01	1.18e+00	-7.51e+00
PERM	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PERT	MJ	1.02e+02	2.56e+00	2.43e+00	0.00e+00	3.46e-01	4.60e+00	2.59e+01	1.18e+00	-7.51e+00
PENRE	MJ	1.56e+03	1.55e+02	1.87e+02	0.00e+00	5.51e+01	2.79e+02	3.97e+02	5.80e+01	-3.90e+01
PENRM	MJ	3.41e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
PENRT	MJ	1.57e+03	1.55e+02	1.87e+02	0.00e+00	5.51e+01	2.79e+02	3.97e+02	5.80e+01	-3.90e+01
SM	kg	1.45e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
RSF	MJ	3.15e+00	3.56e-02	2.17e-02	0.00e+00	3.27e-03	6.39e-02	1.03e-01	5.61e-03	-2.04e-02
NRSF	MJ	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
FW	m3	2.90e+00	1.90e-02	1.66e-01	0.00e+00	3.53e-03	3.41e-02	-1.79e+00	6.62e-02	-1.46e-01

Legend: Components for re-use (CRU) CRU [Kg]; Materials for recycling (MFR) MFR [Kg]; Materials for energy recovery (MER) MER [Kg]; Exported energy (Electrical) EEE [MJ]; Exported energy (Thermal) EET [MJ]; Waste: Hazardous waste disposed HWD [kg (HWD)]; Waste: Non-hazardous waste disposed NHWD [kg (NHWD)]; Waste: Radioactive waste disposed RWD [kg (RWD)]

Flussi in uscita (BS40THINN + Agent)

Parametri	Unità di misura	A1-A3	A4	A5	B1	C1	C2	C3	C4	D
HWD	kg	1.80e+00	1.60e-01	2.96e-01	0.00e+00	4.91e-02	2.87e-01	4.32e-01	3.58e-02	-1.34e-01
NHWD	kg	2.13e+03	1.71e+00	1.19e+02	0.00e+00	3.61e-01	3.06e+00	0.00e+00	3.99e+02	-1.66e+00
RWD	kg	3.19e-03	4.62e-05	3.28e-05	0.00e+00	5.76e-06	8.30e-05	3.81e-04	1.25e-05	-8.83e-05
CRU	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
MFR	kg	5.62e+00	1.37e-01	1.39e-01	0.00e+00	2.60e-02	2.45e-01	1.70e+03	2.17e-02	-8.48e-02
MER	kg	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00	0.00e+00
EEE	MJ	1.79e+00	3.02e-02	3.58e-02	0.00e+00	2.56e-03	5.43e-02	5.50e-01	1.29e-02	-1.24e-01
EET	MJ	2.91e+00	3.65e-02	2.46e-02	0.00e+00	1.22e-03	6.55e-02	1.95e-01	2.43e-03	-1.47e-02

6.11 Informazioni aggiuntive

Il contenuto di carbonio biogenico nel prodotto e nel suo sistema di confezionamento è assente.

6.12 Dichiarazione del contenuto minimo di Riciclato, Recuperato e Sottoprodotto (RRS)

Le tabelle sottostanti riportano la dichiarazione di contenuto minimo di RRS per ogni prodotto, calcolato secondo la metodologia CPDOC262.

Contenuto minimo RRS (BS20)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.2	1.4

Contenuto minimo RRS (BS25)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.3	1.5

Contenuto minimo RRS (BS30)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.3	1.5

Contenuto minimo RRS (BS30R-7)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.3	1.5

Contenuto minimo RRS (BS30R-14)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.3	1.5

Contenuto minimo RRS (BS30R-21)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.3	1.5

Contenuto minimo RRS (BS40HR)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.6	1.8

Contenuto minimo RRS (BS40THINN)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.6	1.8

Contenuto minimo RRS (BS40THINN + Agent)

		Contenuto di riciclato			Contenuto di recuperato %	Sottoprodotto - interno %	Sottoprodotto - esterno %	TOTALE per riga di RRS %
		% PRE consumo	% POST consumo	% TOT riga				
TOTALE	≥	0.0	0.0	0.0	0.2	0.0	1.6	1.8

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