



GRI 302-1, GRI 305-1, GRI 305-2, GRI 305-4 & GRI 305-5: Energy Consumption & Greenhouse gas emissions

Last update: August 2022

Evaluation
 Estimation

In summer 2022, we recalculated our 2020 footprint with an updated methodology to set as a base year for our 2025 sustainability goals. The new methodology was also applied to the 2021 calculation, but not to historic data before the new 2020 base year.

The 2020 base year footprint now includes all our home markets and energy sources, and the following emission factors have been used consistently: Scope 1 = Defra, Scope 2 = IEA (electricity) & GaBi (district heating). This resulted in overall higher emission values than calculated with the old methodology, in which France as well as some other locations and energy sources were still missing.

¹ Old methodology Global: France not included, some locations and energy sources missing + Old methodology Switzerland: With old base year 2012/2013

² New methodology Global & Switzerland: Base year 2020 footprint with an updated methodology to set as a base year for our 2025 goals. The new methodology was also used for the 2021 calculation.

³ Due to a change in the reporting system, energy consumption data was partially missing for Switzerland in 2021 and the emissions are mainly estimated based on the previous year.

⁴ Missing flight data from 2019 - 2021 was added - the additional emissions are compensated

Greenhouse gas emissions, Implenia Global (Scopes 1 + 2)					
by energy source					
Category	Unit	2019 ¹	2020 ¹	2020 ²	2021 ³
Total Scope 1+2	tCO₂eq.	62'289	56'545	62'980	54'191
Total Scope 1	tCO₂eq.	55'117	49'689	51'215	44'814
Total Scope 2	tCO₂eq.	7'172	6'856	11'766	9'377
Fuel (Diesel + Petrol)	tCO ₂ eq.	45'370	41'655	-	-
Diesel	tCO ₂ eq.	-	-	41'855	36'833
Petrol	tCO ₂ eq.	-	-	287	253
Natural gas	tCO ₂ eq.	4'346	4'460	5'015	4'402
Heating fuel	tCO ₂ eq.	5'401	3'574	4'000	3'173
Biodiesel	tCO ₂ eq.	-	-	58	152
Electricity	tCO ₂ eq.	7'172	6'856	11'381	9'072
District Heating	tCO ₂ eq.	-	-	385	306



Greenhouse gas emissions, Implenia Global (Scopes 1 + 2)					
by country					
Category	Unit	2019 ¹	2020 ¹	2020 ²	2021 ³
Total	tCO₂eq.	62'289	56'545	62'980	54'191
Switzerland	tCO ₂ eq.	35'058	31'099	34'462	29'911
Germany	tCO ₂ eq.	18'281	15'981	20'011	17'288
Norway	tCO ₂ eq.	4'856	4'776	2'456	2'506
Austria/Romania	tCO ₂ eq.	2'441	1'592	1'578	2'923
Sweden	tCO ₂ eq.	1'653	3'097	3'131	681
France	tCO ₂ eq.	-	-	1'343	883

Greenhouse gas emissions, Implenia Global (Scopes 1 + 2)					
by country					
Category	Unit	2019 ¹	2020 ¹	2020 ²	2021 ³
Total, Revenue adjusted CO₂-emissions	tCO₂/Mio. CHF	15.1	14.9	16.7	15.5
Switzerland	tCO ₂ /Mio. CHF	15.1	14.4	16.5	16.5
Germany	tCO ₂ /Mio. CHF	16.6	16.2	20.3	18.6
Norway	tCO ₂ /Mio. CHF	19.6	25.5	13.1	12.9
Austria/Romania	tCO ₂ /Mio. CHF	11.6	10.9	10.8	18.5
Sweden	tCO ₂ /Mio. CHF	6.8	9.5	9.6	2.1
France	tCO ₂ /Mio. CHF	-	-	30.1	12.8



Greenhouse gas emissions, Implenia Switzerland (Scopes 1 + 2)											
by energy source											
Category	Unit	2012/2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹	2020 ²	2021 ³
Total Scope 1+2	tCO₂eq.	41'300	41'494	37'913	36'213	35'577	34'160	35'058	31'099	34'461	29'911
Total Scope 1	tCO₂eq.	39'403	39'194	35'892	34'611	33'677	32'501	33'253	29'777	32'239	27'982
Total Scope 2	tCO₂eq.	1'897	2'300	2'021	1'602	1'900	1'658	1'805	1'322	2'222	1'929
Diesel	tCO ₂ eq.	26'629	27'089	25'648	26'518	24'774	25'176	25'540	22'794	24'203	21'007
Petrol	tCO ₂ eq.	1'028	911	562	425	417	373	334	258	255	221
Natural gas	tCO ₂ eq.	6'070	4'777	3'948	3'362	3'782	3'053	4'061	4'294	4'876	4'232
Heating fuel	tCO ₂ eq.	5'676	6'417	5'734	4'306	4'705	3'898	3'319	2'430	2'905	2'521
Electricity + District heating 2020 ²	tCO ₂ eq.	1'897	2'300	2'021	1'602	1'900	1'658	1'805	1'322	2'222	1'929
Absolute Reduction of CO ₂ -emissions	%	previous basis	0.5	-8.2	-12.3	-13.9	-17.3	-15.1	-24.7	basis 2020	-13.2
Revenue adjusted CO ₂ -emissions (excl. ARGE CH)	tCO ₂ /Mio. CHF	17.4	17.8	17.5	16.7	16.8	15.5	15.1	14.4	16.5	16.5
Revenue adjusted reduction of CO ₂ -emissions	%	previous basis	2.3	0.9	-4.0	-3.2	-10.8	-12.8	-17.0	basis 2020	0.0

Greenhouse gas emissions by usage, Implenia Switzerland (Scopes 1 + 2)										
by use										
Usage	2016 ¹		2017 ¹		2018 ¹		2019 ¹		2020 ¹	
	tCO ₂	%	tCO ₂	%	tCO ₂	%	tCO ₂	%	tCO ₂	%
Total	36'213	100	35'577	100	34'160	100	35'058	100	31'099	100
Mobility, lorries and machinery	21'447	59	20'041	56	20'356	60	21'386	61	18'769	60
Mobility, delivery trucks	3'177	9	2'943	8	3'131	9	2'624	7	2'013	6
Mobility, cars	2'318	6	2'208	6	2'063	6	1'864	5	2'271	7
Heating, production facilities	5'876	16	6'041	17	5'065	15	5'692	16	5'909	19
Heating, workshops	544	2	455	1	312	1	441	1	276	1
Heating, construction sites	783	2	1'520	4	1'344	4	974	3	468	2
Heating, office buildings	465	1	470	1	231	1	274	1	71	0
Electrical equipment, construction	844	2	1'121	3	894	3	944	3	690	2
Electrical equipment, production facilities and buildings	758	2	779	2	764	2	861	2	632	2



Greenhouse gas emissions by usage, Implenia Switzerland (Scopes 1 + 2)				
by use				
Usage	2020 ²		2021 ³	
	tCO ₂	%	tCO ₂	%
Total	34'462	100	29'911	100
Mobility, lorries and machinery	19'938	58	17'305	58
Mobility, delivery trucks	2'765	8	2'400	8
Mobility, cars	1'756	5	1'524	5
Heating, production facilities	6'652	19	5'773	19
Heating, workshops	314	1	273	1
Heating, construction sites	532	2	462	2
Heating, office buildings	282	1	245	1
Electrical equipment, construction	1'119	3	971	3
Electrical equipment, production facilities and buildings	1'103	3	957	3

Energy consumption, Implenia Switzerland (Scopes 1 + 2)											
by energy source											
Category	Unit	2012/2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹	2020 ²	2021 ³
Diesel	liter	10'811'894	11'005'918	10'420'444	10'581'349	9'898'019	10'063'491	10'209'529	9'117'887	9'261'898	8'038'903
Gasoline	liter	445'334	391'043	241'142	181'697	178'150	159'595	142'691	110'443	110'444	95'860
Natural gas	kWh	44'327'527	26'006'921	21'499'090	19'195'013	21'591'840	17'434'032	23'186'269	24'520'023	23'934'379	20'773'943
Heating fuel	liter	2'887'374	2'646'619	2'365'113	1'759'013	1'921'863	1'592'340	1'355'813	992'533	1'049'451	910'875
Electricity + District heating 2020 ²	kWh	24'300'542	25'988'997	23'443'747	22'136'213	26'255'029	22'911'991	24'940'133	18'270'376	20'486'000	17'780'908
Diesel	MWh			101'266	102'830	96'189	97'797	99'216	88'608	90'006	78'121
Gasoline	MWh			2'196	1'655	1'622	1'453	1'299	1'006	1'004	871
Natural gas	MWh			21'499	19'195	21'592	17'434	23'186	24'520	23'934	20'774
Heating fuel	MWh			22'984	17'094	18'677	15'474	13'176	9'645	10'199	8'852
Electricity + District heating 2020 ²	MWh			23'444	22'136	26'256	22'912	24'940	18'270	20'486	17'781
Total	MWh			171'389	162'909	164'336	155'071	161'817	142'049	145'629	126'399
Revenue adjusted energy consumption	MWh/CHF			79.2	75.0	77.6	70.2	69.9	65.8	69.7	69.7
revenue adjusted reduction	%				-5.3	-2.0	-11.3	-11.7	-16.9	basis 2020	0.0

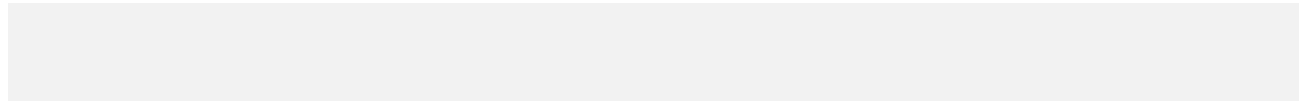


CO ₂ emissions from electricity consumption, Implenia Switzerland (Scope 2)								
in tCO ₂ eq.								
Origin	2012/2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹
Total	1'897	2'300	2'021	1'602	1'900	1'658	1'805	1'322
Non-renewable electricity	827	0	0	0	0	0	0	0
Hydroelectric power (purchased)	0	1'203	776	703	703	703	703	781
Renewable electricity	1'070	1'097	1'245	899	1'197	955	1'102	541

Greenhouse gas emissions from air travel, Implenia Switzerland (Scope 3)										
in tCO ₂ eq.										
Category	2012	2013	2014	2015	2016	2017	2018	2019 ⁴	2020 ⁴	2021 ⁴
Intercontinental flights	369	88	44	17	17	31	10	35	9	22
European flights	221	149	160	200	214	174	147	130	79	71

Greenhouse gas emissions energy & fuel treatment, business trips, rented & leased facilities, Implenia Switzerland (Scope 3)								
in tCO ₂ eq.								
Category	2012/2013	2014	2015	2016	2017	2018	2019	2020
Total	14'086	11'656	9'225	8'419	7'612	7'565	7'518	6'684

Additional information according to GRI & GHG Protocol - 2020 base year	
Source of the emission factors:	Scope 1: Defra Scope 2 - Electricity: IEA Scope 2 - District Heating: GaBi
Global warming potential (GWP):	Scope 1: Defra Scope 2 - Electricity: IEA Scope 2 - District Heating: GaBi
Consolidation approach for emissions:	Operational control
Standards, methodologies, assumptions:	Key figures are based on energy bills for construction sites and properties as well as on external procurement of production, leasing and flight data, conversion and reporting in the Sphera data tool.
Intensity quotient of greenhouse gas emissions:	Adjusted to total revenue with operational control of all business units
Gases included in the calculation:	Only CO ₂ data is included in the calculation.



Additional information according to GRI - old method	
Source of the emission factors:	KBOB - Ökobilanzdaten im BauLevel
Global warming potential (GWP):	https://www.kbob.admin.ch/kbob/de/home/publikationen/nachhaltiges-
Consolidation approach for emissions:	Operational control
Standards, methodologies, assumptions:	Key figures are based on energy bills for construction sites and properties as well as on external procurement of production, leasing and flight data, conversion
Intensity quotient of greenhouse gas emissions:	Adjusted to total sales of all Swiss business units
Gases included in the calculation:	Only CO ₂ data is included in the calculation.



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Fuel (Diesel + Petrol)	tCO ₂ eq.	45'370	41'655	-	-
Diesel	tCO ₂ eq.	-	-	41'855	36'833
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Category	Unit	2019 ¹	2020 ¹	2020 ²	2021 ³
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Greenhouse gas emissions, Implenia Global (Scopes 1 + 2)					
by country					
Category	Unit	2019 ¹	2020 ¹	2020 ²	2021 ³
Total, Revenue adjusted CO₂-emissions	tCO₂/Mio. CHF	15.1	14.9	16.7	15.5
Switzerland	tCO ₂ /Mio. CHF	15.1	14.4	16.5	16.5
Germany	tCO ₂ /Mio. CHF	16.6	16.2	20.3	18.6
Norway	tCO ₂ /Mio. CHF	19.6	25.5	13.1	12.9
Austria/Romania	tCO ₂ /Mio. CHF	11.6	10.9	10.8	18.5
Sweden	tCO ₂ /Mio. CHF	6.8	9.5	9.6	2.1
France	tCO ₂ /Mio. CHF	-	-	30.1	12.8



Greenhouse gas emissions, Implenia Switzerland (Scopes 1 + 2)											
by energy source											
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Total Scope 1+2	tCO ₂ eq.	41'300	41'494	37'913	36'213	35'577	34'160	35'058	31'099	34'461	29'911
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Diesel	tCO ₂ eq.	26'629	27'089	25'648	26'518	24'774	25'176	25'540	22'794	24'203	21'007
Petrol	tCO ₂ eq.	1'028	911	562	425	417	373	334	258	255	221
Natural gas	tCO ₂ eq.	6'070	4'777	3'948	3'362	3'782	3'053	4'061	4'294	4'876	4'232
Heating fuel	tCO ₂ eq.	5'676	6'417	5'734	4'306	4'705	3'898	3'319	2'430	2'905	2'521
Electricity + District heating 2020 ²	tCO ₂ eq.	1'897	2'300	2'021	1'602	1'900	1'658	1'805	1'322	2'222	1'929
Absolute Reduction of CO ₂ -emissions	%	previous basis	0.5	-8.2	-12.3	-13.9	-17.3	-15.1	-24.7	basis 2020	-13.2
Revenue adjusted CO ₂ -emissions (excl. ARGE CH)	tCO ₂ /Mio. CHF	17.4	17.8	17.5	16.7	16.8	15.5	15.1	14.4	16.5	16.5
Revenue adjusted reduction of CO ₂ -emissions	%	previous basis	2.3	0.9	-4.0	-3.2	-10.8	-12.8	-17.0	basis 2020	0.0

Greenhouse gas emissions by usage, Implenia Switzerland (Scopes 1 + 2)										
by use										
Usage	2016 ¹		2017 ¹		2018 ¹		2019 ¹		2020 ¹	
	tCO ₂	%	tCO ₂	%	tCO ₂	%	tCO ₂	%	tCO ₂	%
Total	36'213	100	35'577	100	34'160	100	35'058	100	31'099	100
Mobility, lorries and machinery	21'447	59	20'041	56	20'356	60	21'386	61	18'769	60
Mobility, delivery trucks	3'177	9	2'943	8	3'131	9	2'624	7	2'013	6
Mobility, cars	2'318	6	2'208	6	2'063	6	1'864	5	2'271	7
Heating, production facilities	5'876	16	6'041	17	5'065	15	5'692	16	5'909	19
Heating, workshops	544	2	455	1	312	1	441	1	276	1
Heating, construction sites	783	2	1'520	4	1'344	4	974	3	468	2
Heating, office buildings	465	1	470	1	231	1	274	1	71	0
Electrical equipment, construction	844	2	1'121	3	894	3	944	3	690	2
Electrical equipment, production facilities and buildings	758	2	779	2	764	2	861	2	632	2



Greenhouse gas emissions by usage, Implenia Switzerland (Scopes 1 + 2)				
by use				
Usage	2020 ²		2021 ³	
	tCO ₂	%	tCO ₂	%
Total	34'462	100	29'911	100
Mobility, lorries and machinery	19'938	58	17'305	58
Mobility, delivery trucks	2'765	8	2'400	8
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Electrical equipment, construction	1'119	3	971	3
Electrical equipment, production facilities and buildings	1'103	3	957	3

Energy consumption, Implenia Switzerland (Scopes 1 + 2)											
by energy source											
Category	Unit	2012/2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹	2020 ²	2021 ³
Diesel	liter	10'811'894	11'005'918	10'420'444	10'581'349	9'898'019	10'063'491	10'209'529	9'117'887	9'261'898	8'038'903
Gasoline	liter	445'334	391'043	241'142	181'697	178'150	159'595	142'691	110'443	110'444	95'860
Natural gas	kWh	44'327'527	26'006'921	21'499'090	19'195'013	21'591'840	17'434'032	23'186'269	24'520'023	23'934'379	20'773'943
Heating fuel	liter	2'887'374	2'646'619	2'365'113	1'759'013	1'921'863	1'592'340	1'355'813	992'533	1'049'451	910'875
Electricity + District heating 2020 ²	kWh	24'300'542	25'988'997	23'443'747	22'136'213	26'255'029	22'911'991	24'940'133	18'270'376	20'486'000	17'780'908
Diesel	MWh			101'266	102'830	96'189	97'797	99'216	88'608	90'006	78'121
Gasoline	MWh			2'196	1'655	1'622	1'453	1'299	1'006	1'004	871
Natural gas	MWh			21'499	19'195	21'592	17'434	23'186	24'520	23'934	20'774
Heating fuel	MWh			22'984	17'094	18'677	15'474	13'176	9'645	10'199	8'852
Electricity + District heating 2020 ²	MWh			23'444	22'136	26'256	22'912	24'940	18'270	20'486	17'781
Total	MWh			171'389	162'909	164'336	155'071	161'817	142'049	145'629	126'399
Revenue adjusted energy consumption	MWh/CHF			79.2	75.0	77.6	70.2	69.9	65.8	69.7	69.7
revenue adjusted reduction	%				-5.3	-2.0	-11.3	-11.7	-16.9	basis 2020	0.0

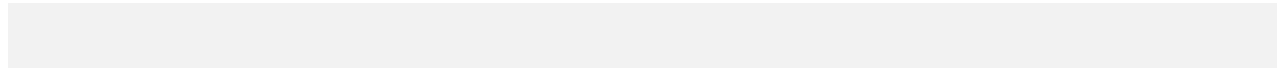


CO ₂ emissions from electricity consumption, Implenia Switzerland (Scope 2)								
in tCO ₂ eq.								
Origin	2012/2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹
Total	1'897	2'300	2'021	1'602	1'900	1'658	1'805	1'322
Non-renewable electricity	827	0	0	0	0	0	0	0
Hydroelectric power (purchased)	0	1'203	776	703	703	703	703	781
Renewable electricity	1'070	1'097	1'245	899	1'197	955	1'102	541

Greenhouse gas emissions from air travel, Implenia Switzerland (Scope 3)										
in tCO ₂ eq.										
Category	2012	2013	2014	2015	2016	2017	2018	2019 ⁴	2020 ⁴	2021 ⁴
Intercontinental flights	369	88	44	17	17	31	10	35	9	22
European flights	221	149	160	200	214	174	147	130	79	71

Greenhouse gas emissions energy & fuel treatment, business trips, rented & leased facilities, Implenia Switzerland (Scope 3)								
in tCO ₂ eq.								
Category	2012/2013	2014	2015	2016	2017	2018	2019	2020
Total	14'086	11'656	9'225	8'419	7'612	7'565	7'518	6'684

Additional information according to GRI & GHG Protocol - 2020 base year	
Source of the emission factors:	Scope 1: Defra Scope 2 - Electricity: IEA Scope 2 - District Heating: GaBi
Global warming potential (GWP):	Scope 1: Defra Scope 2 - Electricity: IEA Scope 2 - District Heating: GaBi
Consolidation approach for emissions:	Operational control
Standards, methodologies, assumptions:	Key figures are based on energy bills for construction sites and properties as well as on external procurement of production, leasing and flight data, conversion and reporting in the Sphera data tool.
Intensity quotient of greenhouse gas emissions:	Adjusted to total revenue with operational control of all business units
Gases included in the calculation:	Only CO ₂ data is included in the calculation.



Additional information according to GRI - old method	
Source of the emission factors:	KBOB - Ökobilanzdaten im BauLevel
Global warming potential (GWP):	https://www.kbob.admin.ch/kbob/de/home/publikationen/nachhaltiges-
Consolidation approach for emissions:	Operational control
Standards, methodologies, assumptions:	Key figures are based on energy bills for construction sites and properties as well as on external procurement of production, leasing and flight data,
Intensity quotient of greenhouse gas emissions:	Adjusted to total sales of all Swiss business units
Gases included in the calculation:	Only CO ₂ data is included in the calculation.