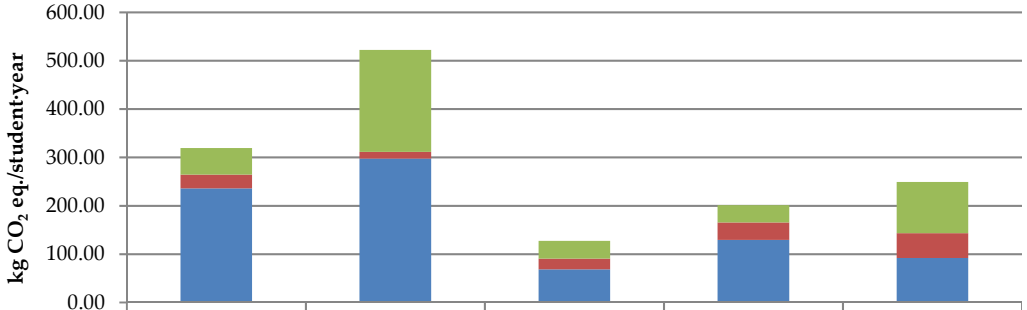
Appendix B.

The data and information provided in this appendix is provided as supporting information for the interpretation of the findings and results described in the main text of paper.

1. Environmental Impacts categories results

1.1. Climate change results

Results on Climate change (CC) per student are in the range between 127.4 (S3) to 522.3 (S2) kg. of CO_2 eq./student·year (Figure A1).

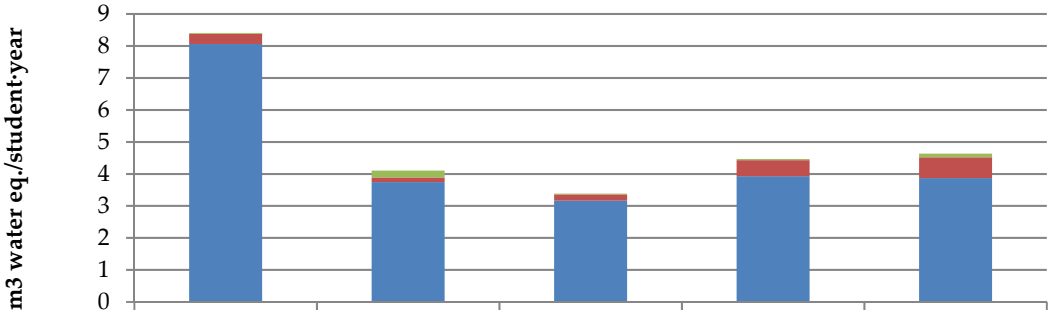


	S1	S2	S3	S4	S5
M&T	55.07	211.04	36.64	35.52	105.94
T&L	28.17	13.86	22.29	36.09	51.45
Building	236.08	297.40	68.46	129.41	91.87

Figure A1. Carbon footprint (kg. of CO_2 eq./student·year) results per school and subsystem.

1.2. Water depletion

Figure A2 shows the results on WD impact.

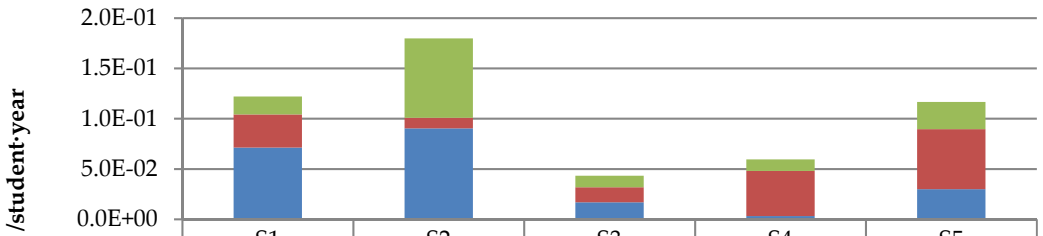


	S1	S2	S3	S4	S5
M&T	2.54E-02	2.14E-01	2.18E-02	3.51E-02	1.15E-01
T&L	3.19E-01	1.46E-01	1.96E-01	4.98E-01	6.47E-01
Building	8.06E+00	3.74E+00	3.16E+00	3.93E+00	3.87E+00

Figure A2. Water depletion impact (m3 of water eq./student·year) results per school and sbsystem.

1.3. Particular Matter

The results on the potential impact of PM emission associated to schools are showed in (Figure A3).

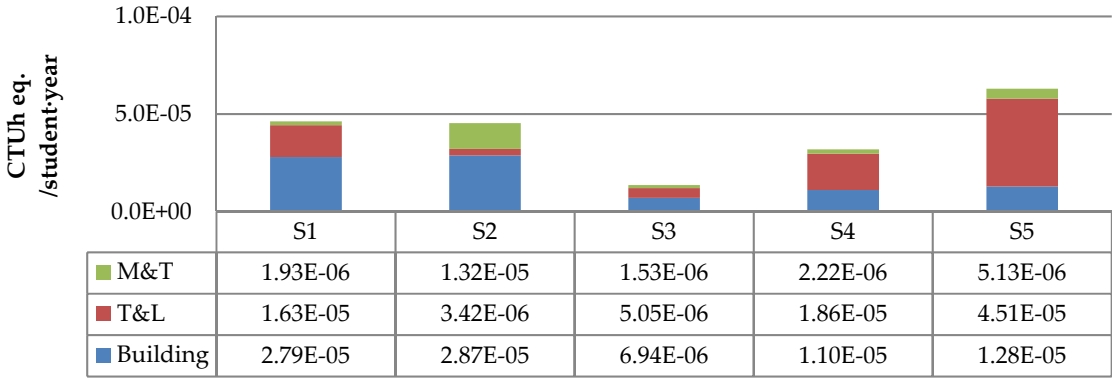


	S1	S2	S3	S4	S5
M&T	1.78E-02	7.89E-02	1.13E-02	1.14E-02	2.71E-02
T&L	3.28E-02	1.05E-02	1.50E-02	4.48E-02	5.96E-02
Building	7.13E-02	9.03E-02	1.68E-02	3.23E-03	2.99E-02

Figure A3. Particular matter (PM) impact results per school and subsystem.

1.4. Human health

The results on the potential impact of HH emission associated to schools are showed in (**Figure A4**).

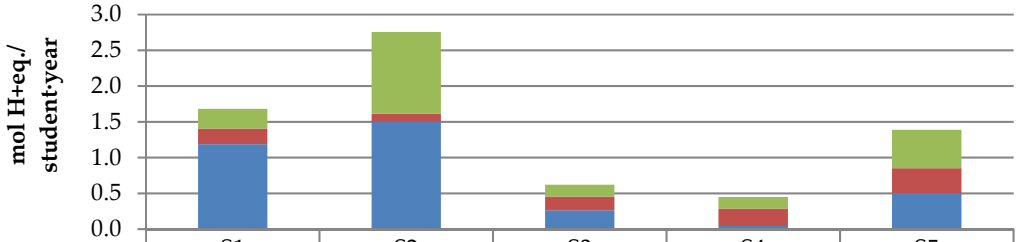


	S1	S2	S3	S4	S5
M&T	1.93E-06	1.32E-05	1.53E-06	2.22E-06	5.13E-06
T&L	1.63E-05	3.42E-06	5.05E-06	1.86E-05	4.51E-05
Building	2.79E-05	2.87E-05	6.94E-06	1.10E-05	1.28E-05

Figure A4. Human health (HH) impact (cancer and non-cancer) results per school and subsystem.

1.5. Acidification

Results on Acidification are ranged between 0.45 (S4) and 2.75 (S2) mol H+eq./ student·year (Figure A5).



	S1	S2	S3	S4	S5
M&T	2.74E-01	1.14E+00	1.66E-01	1.60E-01	5.37E-01
T&L	2.20E-01	1.15E-01	1.91E-01	2.46E-01	3.48E-01
Building	1.19E+00	1.50E+00	2.63E-01	4.18E-02	5.03E-01

Figure A5. Acidification (Ac) impact results per school and subsystem.

2. Social impact results per subsystem and activity

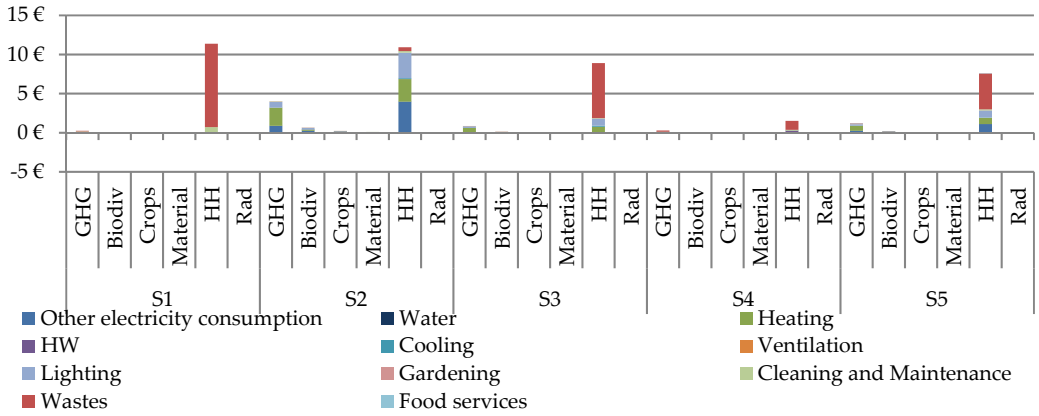


Figure A6. External costs (EC) results of the subsystem Building of each school (S1, S2, S3, S4 and S5) claisified by the receptor affected and the damage (GHG: greenhouse gases damage; Biodiv: loss of biodiversity; Crops: yields affection and deposition over crops; Material: materials corrosion and degradation; HH: human health affection; Rad: radionulcides emission).

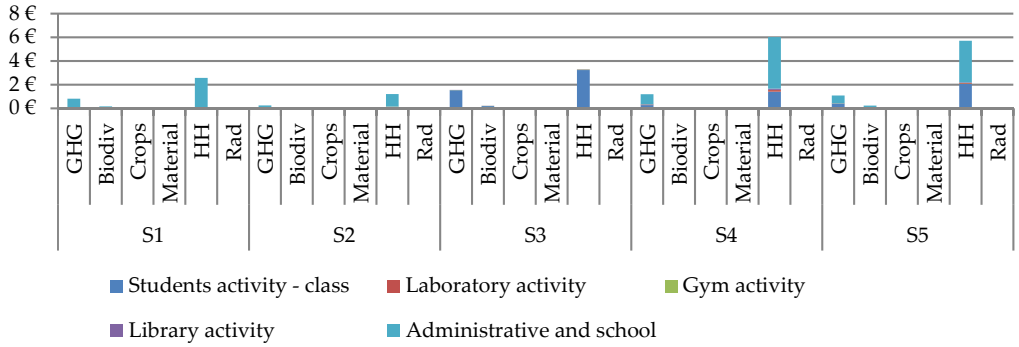


Figure A7. External costs (EC) results of the subsystem Teaching and Learning (T&L) of each school (S1, S2, S3, S4 and S5) claisified by the receptor affected and the damage (GHG: greenhouse gases damage; Biodiv: loss of biodiversity; Crops: yields affection and deposition over crops; Material: materials corrosion and degradation; HH: human health affection; Rad: radionulcides emission).

The contribution of road transport is determinant since release NOx, NMVOC, PM2.5, SO_2 affecting in a relevant manner all the receptors considered in this EC study (Human Health, GHG damage, Biodiversity, Crops, Materials and radionuclides).

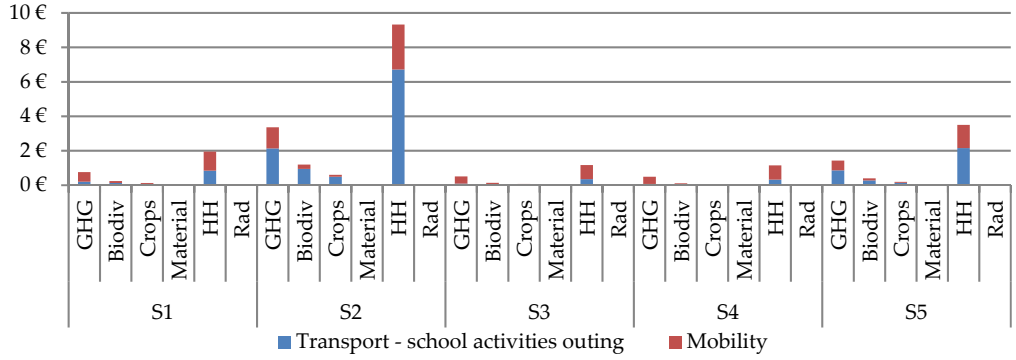


Figure A8. External costs (EC) results of the subsystem Teaching and Learning (T&L) of each school (S1, S2, S3, S4 and S5) claisified by the receptor affected and the damage (GHG: greenhouse gases damage; Biodiv: loss of biodiversity; Crops: yields affection and