



Information regarding the impact, as of 30 June 2021, of the proceeds of the Green Buildings Bonds issued by BPCE SA and Natixis SA since 2019

Impact Report Green Building



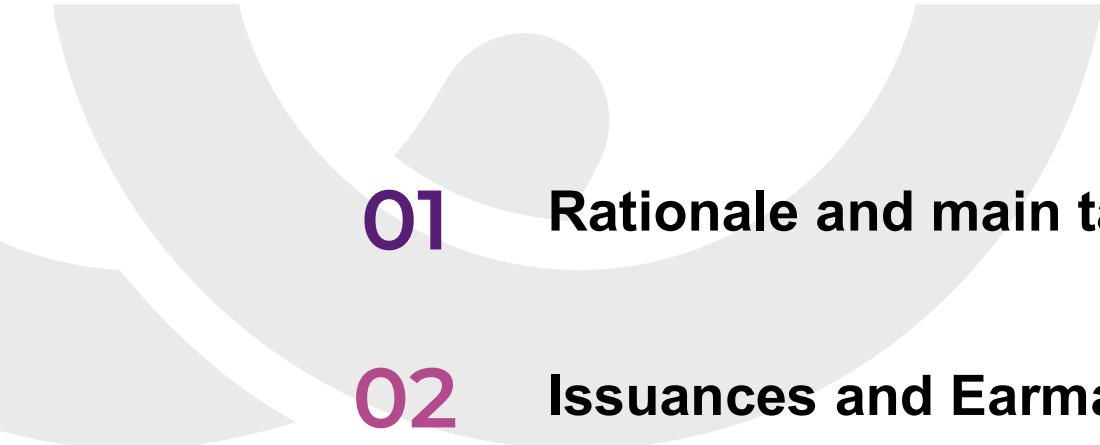


FOREWORD

The reporting was produced with respect to the Methodology Note dedicated to Green Building Assets published on March 2020 and available on Groupe BPCE institutional website:

<https://groupebpce.com/en/investors/funding/green-bonds>

This reporting is based on the issuances in force and earmarked assets as of End of June 2021 as described in the associated Allocation Report also available on Groupe BPCE institutional website.

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01 Rationale and main take-aways



RATIONALE, DEFINITIONS & METHODOLOGIES

- Housing accounts for 30%* of global annual greenhouse gas emissions and 20% for France. Reducing the level of greenhouse gas emission associated with housing constitutes one of the main challenges included within the “Loi Energie-Climat” (Energy & Climate Law)**.
- Green Building Bonds issued by Groupe BPCE as of End of June 2021 aim at contributing to the reduction of the greenhouse gas emission associated with the French housing stock in financing or refinancing real estate assets that belong to the top 15% of the most efficient buildings.
- The impact report presents the estimated impacts of the Green building issuances in terms of energy savings and associated avoided greenhouse gas emission on a yearly basis.
- The methodology developed is based on the number of square meters financed or refinanced thanks to Green Building Issuances. The amount of square meters financed is calculated as the loan amount divided by the average price of a square meter of the Department where the building is located.
- Two methodologies are used in order to measure the amount of saved energy:
 - **Primary Energy Consumption***** measures the total energy demand of a country. It covers consumption of the energy sector itself, losses during transformation (for example, from oil or gas into electricity) and distribution of energy, and the final consumption by end users. It excludes energy carriers used for non-energy purposes (such as petroleum not used for combustion but for producing plastics).
 - **Final energy consumption***** is the total energy consumed by end users, such as households, industry and agriculture. It is the energy which reaches the final consumer's door and excludes that which is used by the energy sector itself. Final energy consumption excludes energy used by the energy sector, including for deliveries, and transformation. It also excludes fuel transformed in the electrical power stations of industrial auto-producers and coke transformed into blast-furnace gas where this is not part of overall industrial consumption but of the transformation sector.
- As stated in the Methodology Note, the impact report relies on publicly available data. This report is based on data made public by the French Ministry of Ecological and Solidarity Transition and the consulting firm Wild Trees.
- As the Thermal Regulation 2012 “RT 2012” acted as the main French regulatory reference for housing by the time the methodology note was published this report presents the results in terms of Climatic Areas. In effect, the RT 2012 divides the French territory into eight Climatic Areas depending on the average temperatures and sets specific standards for each area around the central reference of 50 kWh/sqm/year.

*UNEP FI, *Sustainable Real Estate Investment*, February 2016

**<https://www.ecologie.gouv.fr/loi-energie-climat>

***https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Primary_energy_consumption

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Final_energy_consumption



MAIN TAKE-AWAYS

- Issuances of Green Building Bonds represent Eur1.907M and 843th square meters. Given that the average size of a dwelling is 90sqm*. The issuances finance or refinance the equivalent of **10.000** dwellings.
- Main Residences included within the eligible portfolio consume **60%** less Primary Energy per square meter than the French Main Residences built prior to 2017 and **33%** in terms of Final Energy.
- The difference between the two levels results from the share of electricity results from the share of electricity** in the energy consumption mix of housing.
- The **estimated Primary Energy** saved amounts to **150 GWh** and the **estimated Final Energy** saved represents **46 GWh**.
- Taking into account the conversion factor from Energy to Greenhouse gas emission, the amount of estimated avoided Greenhouse gas emission associated to **Primary Energy saved** represents **27M** Tons of Co2 and **8M** Tons in terms of **Final Energy** saved.
- In other words, 1000€ invested in Green Building bonds allows 79kWh of Primary Energy savings and 14k Co2 per year and 24,07 and 4,23 in Final Energy savings in Final Energy respectively:

	Primary Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)	Final Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)
1000€ invested	78,94	14,21	24,07	4,23



02 Issuances and Earmarked assets



ISSUANCES

- Groupe BPCE issued a Green Building Covered Bond in May 2020 and Natixis SA issued two bonds in September 2020 and April 2021.
- Total issuances account for Eur 1.907M as of June 2021.

BONDS			
ISSUER	BPCE SFH	Natixis Ambition Durable 1	Natixis Ambition Durable 2
ISIN	FR0013514502	FR0013521580	FR0014000TV0
CURRENCY	EUR	EUR	EUR
PROCEEDS (billion)	1 250	285	372
EQ Euros (millions)	1 250	285	372
ISSUANCE DATE	27/05/2020	07/09/2020	16/04/2021
REPAYMENT DATE	27/05/2030	30/08/2030	03/01/2031
TOTAL Euros	1 907		



EARMARKED ASSETS (1/2)

- As of End of June 2021, earmarked assets amount to Eur 1.915M the equivalent of 843th square meters.
- Multi-family represents 68% of the earmarked assets and 76% of the financed square meters.

Building type	Earmarked Assets (€)	%	#square meter*	%
Multifamily	1 308 578 676	68%	641 004	76%
Single Family	536 130 124	28%	178 367	21%
Not available	70 854 213	4%	23 980	3%
Total	1 915 563 013	100%	843 350	100%

- The RT 2012 designs specific climatic areas with specific geographic areas that take into account the summer and winter average temperatures**:

Climatic Area**	Earmarked Assets (€)	%	# square meter	%
H1A	494 884 013	25,8%	177 913	21,1%
H1B	224 223 431	11,7%	137 583	16,3%
H1C	442 036 427	23,1%	190 121	22,5%
H2A	92 046 381	4,8%	48 783	5,8%
H2B	173 519 406	9,1%	96 585	11,5%
H2C	99 830 693	5,2%	44 536	5,3%
H2D	53 675 625	2,8%	26 012	3,1%
H3	335 347 036	17,5%	121 816	14,4%
Total	1 915 563 013	100,0%	843 350	100,0%

*Number of square meters calculated as Loan amount divided by the average price per square meters of the French department where the building lies. The average price by department is provided on a yearly basis by BPCE Solutions Immobilières.

**<http://observatoire.rt-2012.com> – see Annex



03 Primary Energy savings and avoided Green Gas Emission



PRIMARY ENERGY SAVINGS AND AVOIDED GREEN GAS EMISSION: METHODOLOGY (1/2)

- The French Minister for Energy Transition disclosed the breakdown of the Main Residences in France by Energetic Performance Certificate, building category and construction year*.

Energetic Performance Certificate	Min Consumption (kWh/Square meter)	Max Consumption (kWh/Square meter)	# Single Family built 1900 - 2016	% Single Family built 1900 - 2016	# Single Family built 2017 - 2021	% Single Family built 2017 - 2021	# Multi Family built 1900 - 2016	% Multi Family built 1900 - 2016	# Multi Family built 2017 - 2021	% Multi Family built 2017 - 2021
A	0	50	203 263	6%	180 514	28%	129 732	4%	172 495	54%
B	51	90	318 351	9%	406 758	62%	188 344	5%	132 135	42%
C	91	150	620 192	17%	55 647	8%	598 980	17%	10 293	3%
D	151	230	1 252 477	34%	9 742	1%	1 145 711	33%	2 529	1%
E	231	330	858 265	24%	2 359	0%	894 184	26%	592	0%
F	331	450	296 507	8%	439	0%	364 478	11%	114	0%
G	451	451	102 757	3%	167	0%	123 493	4%	50	0%
Average Consumption (kWh/Square meter)			242		87		259		72	
Total			3 651 812	100%	655 626	100%	3 444 922	100%	318 208	100%

- Thanks to the data made available, we can confirm that almost all the dwellings built between 2017 & 2021 achieve an EPC of A or B that is consistent with the RT 2012 regulation.
- There is an impressive shift in energy consumption between main residences built prior and after 2017:
 - 242 kWh per square meter per year for single family dwellings built prior 2017 compared with 87 for single family dwellings built afterwards;
 - Similarly, 259 kWh per square meter per year and 72 kWh per square meter per year for multi family dwellings.



PRIMARY ENERGY SAVINGS AND AVOIDED GREEN GAS EMISSION: METHODOLOGY (2/2)

- Based on this information, we calculate the average primary energy consumption savings by square meter of main residences built between 2017 and 2021 in France compared to main residences built earlier:

Average Consumption (kWh/Square meter)	Single Family built 1900 - 2016	Single Family built 2017 - 2021	Multi Family built 1900 - 2016	Multi Family built 2017 - 2021
	242	87	259	72
Difference in Energy Consumption per square between dwellings built prior and after 2017 (kWh/square meter)	154	64%	187	72%

- Average Primary Energy consumption from main residences built between 2017 and 2021 is more than **60%** lower than the Single Family main residences built prior and 72% for Multi Family dwellings:
- The amount of saved energy consumption equals the amount of square meters time the difference in energy consumption between main residences built between 2017 and 2021 and those built earlier.
- The amount of avoided greenhouse gas emission equals the amount of saved energy time the energy factor for buildings in France: 0,1756*



PRIMARY ENERGY SAVINGS AND AVOIDED GREENHOUSE GAS EMISSION: RESULTS

➤ According to the previous methodology, the amounts of primary energy saved by the earmarked assets amount to 151GWh and 26M of tons of avoided greenhouse gas emission:

Building type	Primary Energy saved (kWh)	%	Avoided Greenhouse gas emissions (kCO2)
Multi-family	119 746 107	79%	21 027 416
Single Family	27 542 945	18%	4 836 541
Not available	3 702 891	2%	650 228
Total	150 991 944	100%	26 514 185

➤ Below, the split by climatic areas:

Climatic Area	Primary Energy saved (kWh)	%	Avoided Greenhouse gas emissions (kCO2)
H1A	31 018 640	21%	5 446 873
H1B	25 120 014	17%	4 411 074
H1C	33 773 544	22%	5 930 634
H2A	8 908 596	6%	1 564 349
H2B	17 614 540	12%	3 093 113
H2C	7 997 694	5%	1 404 395
H2D	4 783 606	3%	840 001
H3	21 775 309	14%	3 823 744
Total	150 991 944	100%	26 514 185



04 Final Energy savings and avoided Green Gas Emission



FINAL ENERGY SAVINGS AND AVOIDED GREEN GAS EMISSION: METHODOLOGY

- The consulting firm Wild Trees* produced calculation of the average final energy consumption for French main residences and of the difference in final energy consumption per square meter between the stock of main residences and main residences compliant with RT 2012:

Asset category	%	Average final energy consumption per square meter of main residences (kWh/square meter)	Average final energy consumption per square meter of main residences compliant with RT 2012 (kWh/square meter)	Saved energy i.e. difference in final energy consumption between average French main residences and main residences compliant with RT 2012 (kwh/square meter)
Multifamily	76%	158,0	108,8	49,2
Single Family	21%	192,4	117,3	75,1
Not available	3%	158,0	108,8	49,2
Average	-	165,2	110,6	54,6

- Average Final Energy consumption from main residences compliant with RT 2012 is **33%** lower than the average main residence.
- Based on this calculation, we calculate the amount of saved final energy consumption as the amount of square meters time the energy saved for Multi-family and Single-family dwellings.
- The amount of avoided greenhouse gas emission equals the amount of saved energy time the energy factor for buildings in France: 0,1756**

*<https://wild-trees.co>

**Energy Factor as calculated by Wild Trees considering the various sources of energy consumption



FINAL ENERGY SAVINGS AND AVOIDED GREEN GAS EMISSION: RESULTS

➤ According to the previous methodology, the amounts of final energy saved by the earmarked assets amount to 46gWh and 8M of tons of avoided greenhouse gas emission:

Building type	Final Energy saved (kWh)	%	Avoided Greenhouse gas emissions (kCO2)
Multifamily	31 537 396	68%	5 537 967
Single Family	13 395 334	29%	2 352 221
Not available	1 179 803	3%	207 173
Total	46 112 532	100%	8 097 361

➤ Below, the split by climatic areas:

Climatic Area	Final Energy saved (kWh)	%	Avoided Greenhouse gas emissions (kCO2)
H1A	10 254 693	22%	1 800 724
H1B	7 206 003	16%	1 265 374
H1C	10 649 786	23%	1 870 102
H2A	2 554 354	6%	448 545
H2B	5 052 574	11%	887 232
H2C	2 378 458	5%	417 657
H2D	1 327 665	3%	233 138
H3	6 689 000	15%	1 174 588
Total	46 112 532	100%	8 097 361



05 Results by Regional Banks



RESULTS BY REGIONAL BANKS: BANQUES POPULAIRES

Regional Bank	Primary Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)	Final Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)	Earmarked Assets (€)
BP ALSACE LORRAINE CHAMPAGNE	15 033 194	2 639 829	4 289 428	753 224	139 123 572
BP AQUITAINE CENTRE ATLANTIQUE	1 766 549	310 206	504 163	88 531	24 151 719
BP ATLANTIQUE	632 199	111 014	181 664	31 900	7 303 015
BP AURA	8 078 194	1 418 531	2 363 956	415 111	94 609 382
BP BOURGOGNE FRANCHE-COMTE	241 735	42 449	67 739	11 895	1 860 629
BP MED	5 136 366	901 946	1 506 982	264 626	87 547 035
BP NORD	4 801 516	843 146	1 342 591	235 759	49 842 283
BP OCCITANE	477 901	83 919	132 380	23 246	4 326 062
BP RIVES DE PARIS	150 854	26 490	52 627	9 241	3 185 713
BP SUD	2 298 752	403 661	660 627	116 006	26 521 859
BP VAL DE France	5 631 159	988 832	1 635 922	287 268	67 748 874
BRED	1 257 178	220 760	400 558	70 338	32 597 086
CASDEN	762 550	133 904	216 278	37 978	8 543 350
CREDIT COOPERATIF	1 128 980	198 249	472 253	82 928	16 669 843
Total	47 397 127	8 322 935	13 827 168	2 428 051	564 030 423



RESULTS BY REGIONAL BANKS: CAISSES D'EPARGNE

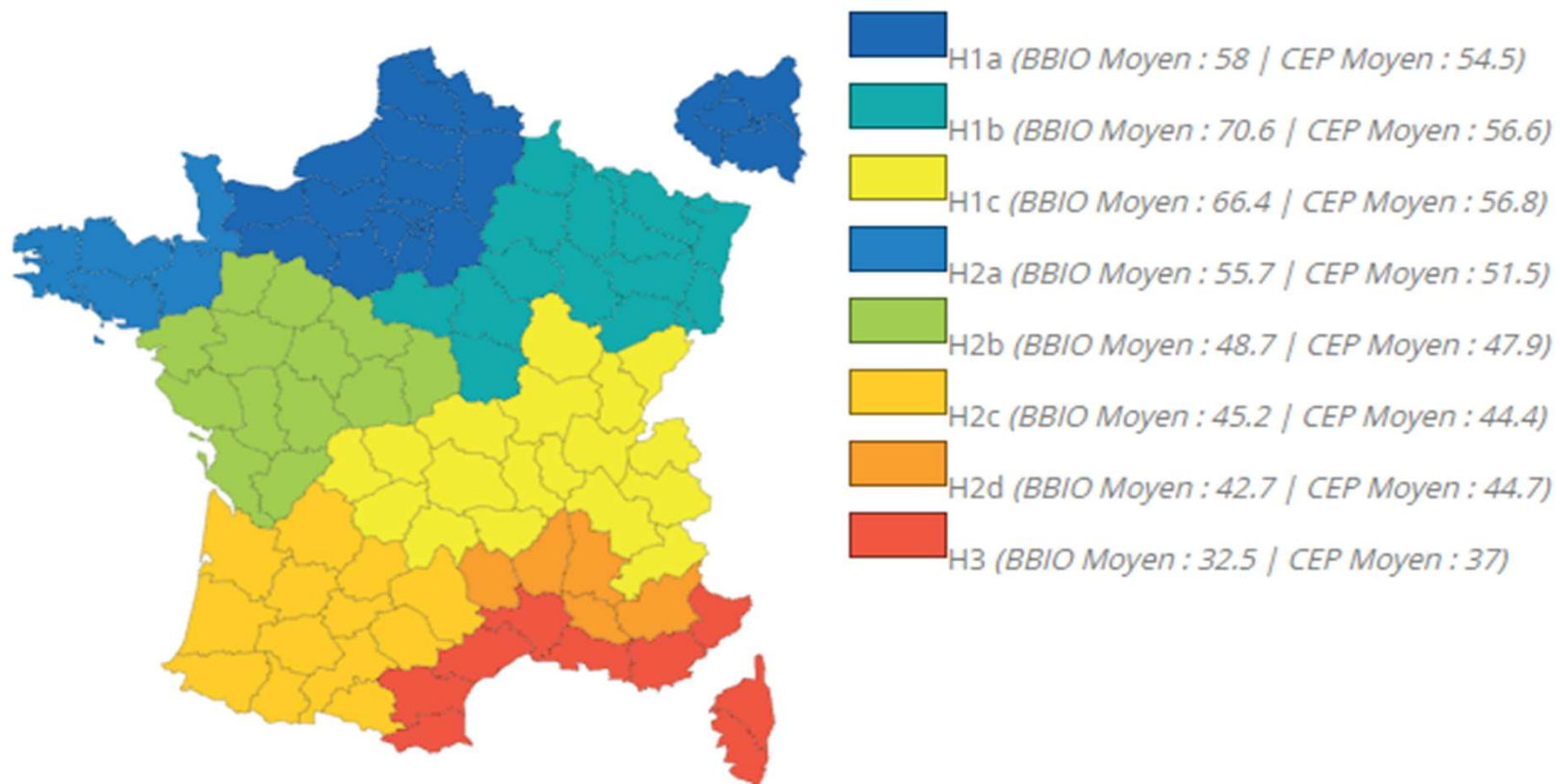
Regional Bank	Primary Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)	Final Energy saved (kWh)	Avoided Greenhouse gas emissions (kCO2)	Earmarked Assets (€)
CE AQUITAINE POITOU CHARENTES	1 441 841	253 187	447 784	78 631	18 051 819
CE AUVERGNE LIMOUSIN	2 911 576	511 273	841 934	147 844	21 844 072
CE BOURGOGNE FRANCHE COMTE	8 970 155	1 575 159	2 549 507	447 693	71 532 221
CE BRETAGNE PAYS LOIRE	16 531 678	2 902 963	4 803 741	843 537	180 397 640
CE COTE AZUR	2 954 269	518 770	1 006 304	176 707	63 255 771
CE HDF	5 789 997	1 016 723	1 687 777	296 374	58 960 142
CE IDF	8 848 556	1 553 806	3 687 046	647 445	209 511 519
CE LANGUEDOC ROUSSILLON	5 501 517	966 066	1 578 492	277 183	70 158 501
CE LOIRE CENTRE	6 985 854	1 226 716	2 020 056	354 722	68 321 759
CE LOIRE DROME ARDECHE	2 253 447	395 705	650 308	114 194	20 949 478
CE LORRAINE CHAMPAGNE ARDENNES	5 897 982	1 035 686	1 741 186	305 752	55 147 959
CE MIDI PYRENNES	3 664 284	643 448	1 086 830	190 847	43 583 424
CE NORMANDIE	7 795 967	1 368 972	2 198 058	385 979	82 358 399
CE PROVENCE ALPES CORSE	8 519 838	1 496 084	2 648 234	465 030	122 252 799
CE RHONES ALPES	15 527 855	2 726 691	5 338 107	937 372	265 207 085
Total	103 594 817	18 191 250	32 285 364	5 669 310	1 351 532 590
Total Regional banks	150 991 944	26 514 185	46 112 532	8 097 361	1 915 563 013



06 Annex



ANNEX: FRENCH TERRITORY BY CLIMATIC AREAS*:



*BBIO stands for Bioclimatic Needs expressed in kWh per square meter / CEP means Primary Energetic Coefficient expressed in kWh per square meter