

# Recalculations - Ammonia

The small changes within the **National Total reported for 1990 (-3.1 kt | -0.43 %)** result almost entirely from revisions in NFRs **2.B.10.a** (-3.14 kt), **3.B.3** (+4.69 kt) and **3.D.a.2.a** (+1.54 kt) **together with less significant changes**

**throughout NFRs 1 and 2. The most significant relative change occurs for NFR 2.G with minus 58 %.** **Table 1: Changes in emission estimates for 1990** ^ Submission 2020 ^ Submission 2021 ^ Difference ^ Reasoning ^ NFR Code ^ [kt] ^ relative ^ see description and reasoning in: ^ **NATIONAL TOTAL** ^ **715,09** ^ **718,16** ^ **3,07** ^ **0,43%** ^ sub-category chapters ^ NFR 1 - Energy ^ **15,53** ^ **15,54** ^ **0,01** ^ **0,03%** ^ sub-category chapters ^ | **1.A.3.b iii** | **0,08** | **0,08** | **0,00** | **0,03%** | [here](#) | | **1.A.3.c** | **0,02** | **0,03** | **0,01** | **38,23%** | [here](#) | | **1.A.3.d ii** | **0,01** | **0,01** | **0,00** | **-24,12%** | [here](#) | | **1.A.4.b ii** | **0,000162** | **0,000160** | **-0,000003** | **-1,71%** | [here](#) | | **1.A.4.c iii** | **0,0002** | **0,0001** | **-0,0001** | **-54,03%** | [here](#) | | **1.A.5.b** | **0,3000** | **0,2999** | **-0,0001** | **-0,05%** | [here](#) | ^ NFR 2 - IPPU ^ **17,81** ^ **14,68** ^ **-3,14** ^ **-17,60%** ^ sub-category chapters ^ | **2.B.10.a** | **9,57** | **6,44** | **-3,14** | **-32,76%** | [here](#) | ^ NFR 3 - Agriculture ^ **681,58** ^ **687,79** ^ **6,20** ^ **0,91%** ^ sub-category chapters ^ | **3.B.1.b** | **91,39** | **91,43** | **0,03** | **0,04%** | [here](#) | | **3.B.3** | **117,12** | **121,81** | **4,69** | **4,00%** | [here](#) | | **3.B.4.g i** | **11,45** | **11,31** | **-0,14** | **-1,19%** | [here](#) | | **3.B.4.g iii** | **3,96** | **3,99** | **0,02** | **0,61%** | [here](#) | | **3.B.4.g iv** | **2,48** | **2,47** | **-0,01** | **-0,50%** | [here](#) | | **3.D.a.2.a** | **273,67** | **275,21** | **1,54** | **0,56%** | [here](#) | | **3.D.a.3** | **22,16** | **22,23** | **0,07** | **0,30%** | [here](#) | ^ NFR 5 - Waste ^ **0,16** ^ **0,16** ^ **0,00** ^ **0,00%** ^ ^ NFR 6 - Other ^ **NA** ^ ^ ^ ^ **Changes within the National Total reported for 2018 (-35.2 kt | -5.53 %)**

**result almost entirely from revisions in NFR 3 (-34.6 kt) together with less significant changes throughout NFRs 1 and 2. The most significant relative change occurs for NFR 2.G with minus 50 %.** **Table 2: Changes in emission estimates for 2018** ^ Submission 2020 ^ Submission 2021 ^ Difference ^ Reasoning ^ NFR Code ^ [kt] ^ relative ^ see description and reasoning in: ^ **NATIONAL TOTAL** ^ **636,43** ^ **601,24** ^ **-35,18** ^ **-5,53%** ^ sub-category chapters ^ NFR 1 - Energy ^ **13,67** ^ **13,82** ^ **0,15** ^ **1,12%** ^ sub-category chapters ^ | **1.A.1.a** | **0,686** | **0,704** | **0,02** | **2,75%** | [here](#) | | **1.A.1.b** | **0,489** | **0,582** | **0,09** | **18,89%** | [here](#) | | **1.A.1.c** | **0,0269** | **0,0268** | **-0,0001** | **-0,33%** | [here](#) | | **1.A.2.a** | **0,1069** | **0,1078** | **0,0010** | **0,89%** | [here](#) | | **1.A.2.b** | **0,0070** | **0,0071** | **0,0001** | **1,04%** | [here](#) | | **1.A.2.e** | **0,001** | **0,002** | **0,0003** | **21,26%** | [here](#) | | **1.A.2.f** | **0,024** | **0,021** | **-0,003** | **-11,34%** | [here](#) | | **1.A.2.g vii** | **0,007** | **0,008** | **0,001** | **9,37%** | [here](#) | | **1.A.2.g viii** | **0,386** | **0,385** | **-0,001** | **-0,35%** | [here](#) | | **1.A.3.a i(i)** | **0,137** | **0,132** | **-0,004** | **-3,08%** | [here](#) | | **1.A.3.a ii(i)** | **0,031** | **0,033** | **0,003** | **8,47%** | [here](#) | | **1.A.3.b i** | **8,939** | **9,105** | **0,17** | **1,86%** | [here](#) | | **1.A.3.b ii** | **0,157** | **0,151** | **-0,01** | **-3,76%** | [here](#) | | **1.A.3.b iii** | **0,735** | **0,709** | **-0,03** | **-3,55%** | [here](#) | | **1.A.3.b iv** | **0,0210** | **0,0214** | **0,0004** | **1,72%** | [here](#) | | **1.A.3.c** | **0,008** | **0,007** | **-0,001** | **-11,48%** | [here](#) | | **1.A.3.d ii** | **0,0069** | **0,0071** | **0,0002** | **2,79%** | [here](#) | | **1.A.4.a i** | **0,475** | **0,415** | **-0,06** | **-12,70%** | [here](#) | | **1.A.4.a ii** | **0,00194** | **0,00189** | **-0,00006** | **-2,87%** | [here](#) | | **1.A.4.b i** | **1,354** | **1,328** | **-0,03** | **-1,92%** | [here](#) | | **1.A.4.b ii** | **0,00037660** | **0,00037655** | **-0,0000005** | **-0,01%** | [here](#) | | **1.A.4.c i** | **0,044** | **0,038** | **-0,005** | **-12,16%** | [here](#) | | **1.A.4.c ii** | **0,0096** | **0,0093** | **-0,0003** | **-2,81%** | [here](#) | | **1.A.4.c iii** | **0,00079** | **0,00081** | **0,00002** | **2,70%** | [here](#) | | **1.A.5.a** | **0,004321** | **0,004324** | **0,000003** | **0,08%** | [here](#) | | **1.A.5.b** | **0,011** | **0,015** | **0,004** | **36,91%** | [here](#) | ^ NFR 2 - IPPU ^ **12,439** ^ **11,807** ^ **-0,63** ^ **-5,08%** ^ sub-category chapters ^ | **2.A.3** | **0,76** | **0,76** | **0,00** | **-0,22%** | [here](#) | | **2.G** | **1,25** | **0,62** | **-0,63** | **-50,27%** | [here](#) | ^ NFR 3 - Agriculture ^ **606,72** ^ **572,13** ^ **-34,59** ^ **-5,70%** ^ sub-category chapters ^ | **3.B.1.a** | **64,24** | **50,74** | **-13,49** | **-21,01%** | [here](#) | | **3.B.1.b** | **73,74** | **65,85** | **-7,90** | **-10,71%** | [here](#) | | **3.B.2** | **1,44** | **1,52** | **0,08** | **5,83%** | [here](#) | | **3.B.3** | **90,63** | **90,54** | **-0,09** | **-0,10%** | [here](#) | | **3.B.4.g i** | **9,65** | **7,85** | **-1,80** | **-18,67%** | [here](#) | | **3.B.4.g ii** | **9,35** | **12,43** | **3,09** | **33,00%** | [here](#) | | **3.B.4.g iii** | **10,59** | **10,62** | **0,02** | **0,21%** | [here](#) | | **3.B.4.g iv** | **1,27** | **1,55** | **0,28** | **22,04%** | [here](#) | | **3.D.a.1** | **73,52** | **76,79** | **3,27** | **4,45%** | [here](#) | | **3.D.a.2.a** | **196,64** | **175,65** | **-20,98** | **-10,67%** | [here](#) | | **3.D.a.2.b** | **1,89** | **1,73** | **-0,16** | **-8,55%** | [here](#) | | **3.D.a.2.c** | **55,66** | **54,63** | **-1,03** | **-1,86%** | [here](#) | | **3.D.a.3** | **8,71** | **12,93** | **4,22** | **48,39%** | [here](#) | | **3.i** | **3,29** | **3,20** | **-0,09** | **-2,68%** | [here](#) | ^ NFR 5 - Waste ^ **3,597** ^ **3,483** ^ **-0,11** ^ **-3,15%** ^ sub-category chapters\*\* ^

5.B.1	2,04	1,96	-0,08	-4,10%	<a href="#">here</a>
5.B.2	1,56	1,53	-0,03	-1,91%	