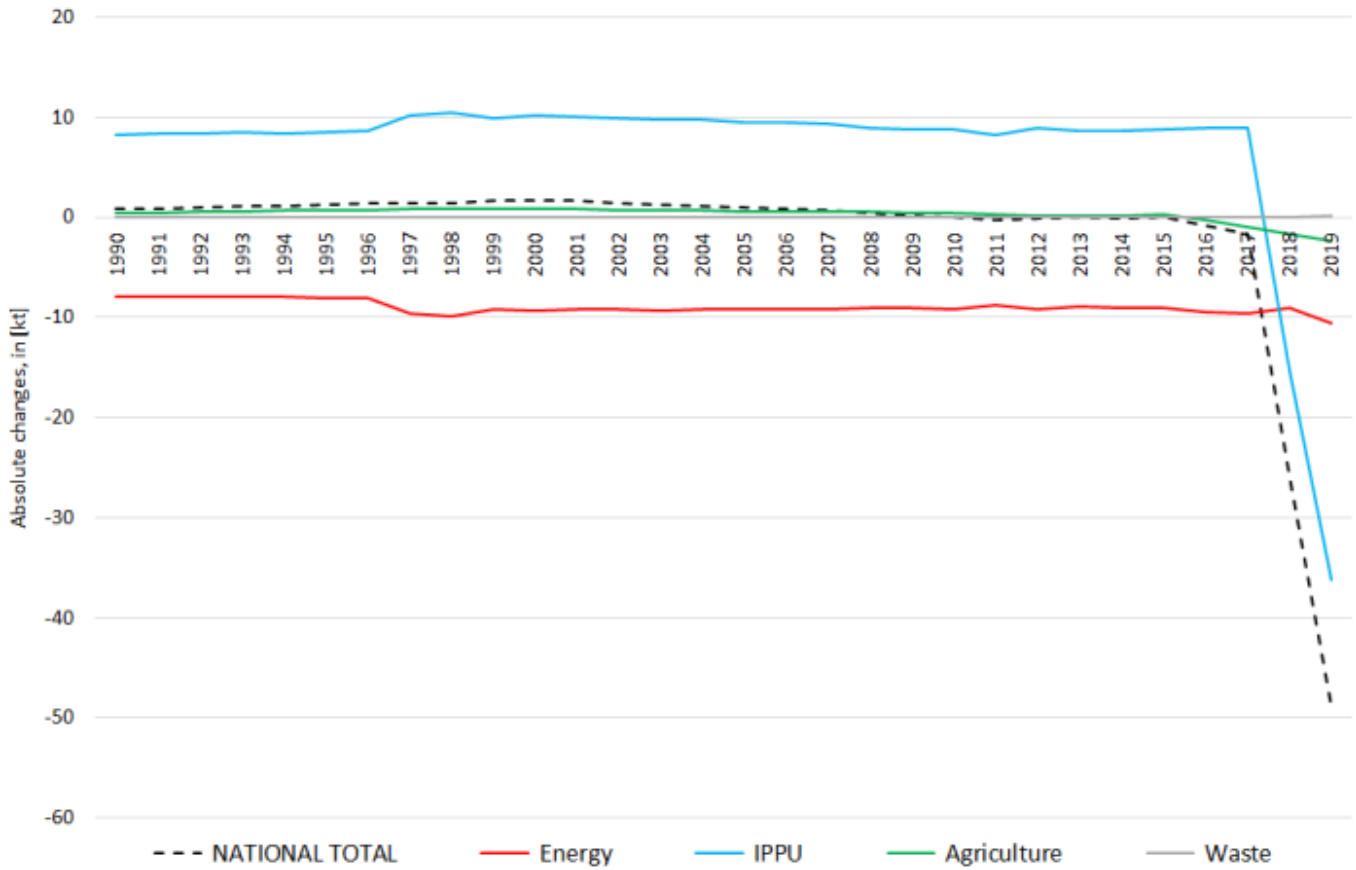
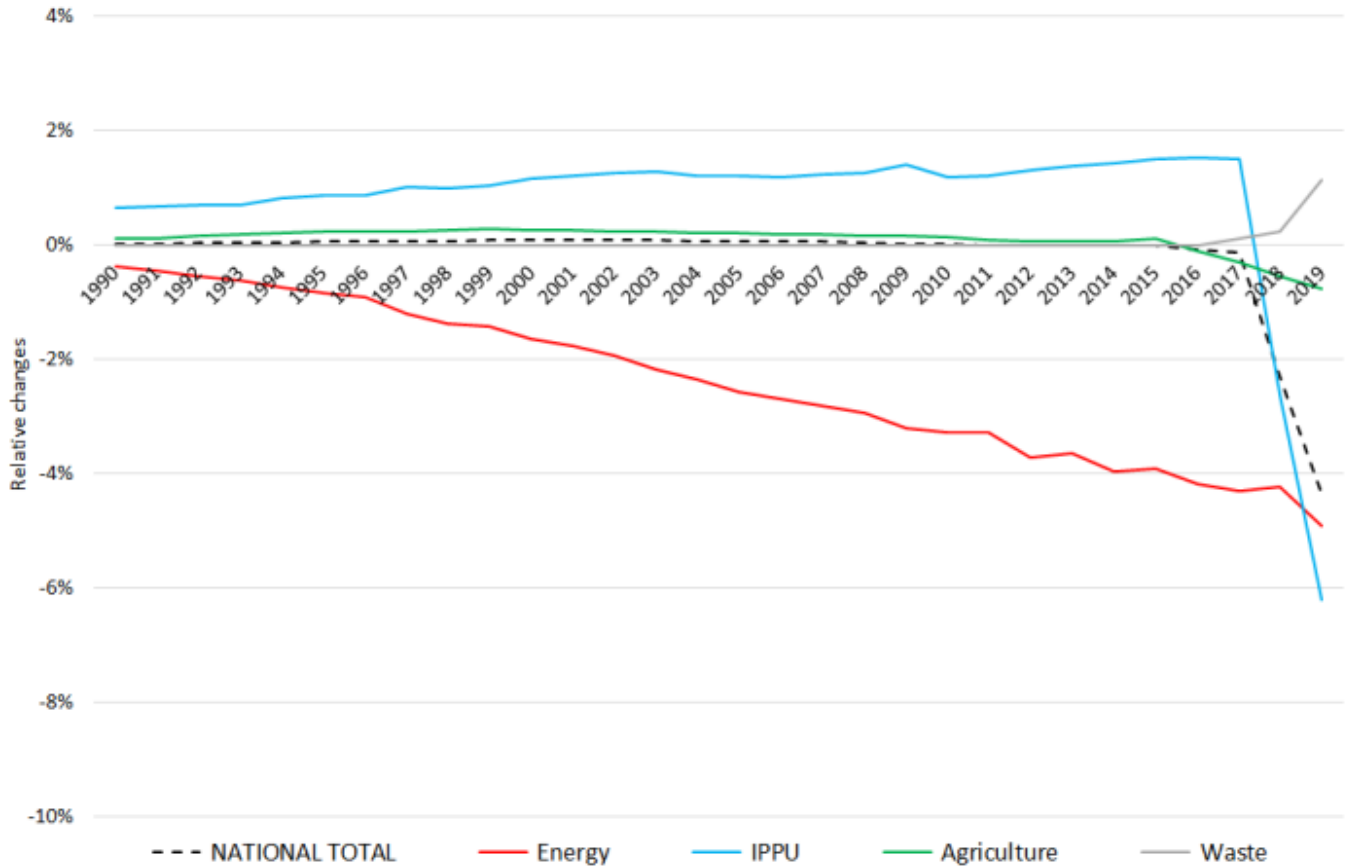


# Recalculations - Non-Methane Volatile Organic Compounds

Revision of NMVOC emissions over time





The significant changes within the **National Total reported for 1990 (+594 kt | +17.26 %)**

Table 1: Changes in emission estimates for 1990

| absolute changes in emissions reported for 1990 |                 |                 |                |               | Submission 2020                   | Submission 2021 | Difference | Reasoning |
|---|-----------------|-----------------|----------------|---------------|-----------------------------------|-----------------|------------|-----------|
|   |                 |                 |                |               |                                   |                 |            |           |
| NFR Code  | [kt]            |                 |                | relative      | see description and reasoning in: |                 |            |           |
| <b>NATIONAL TOTAL</b>                           | <b>4.033,30</b> | <b>3.890,85</b> | <b>-142,45</b> | <b>-3,53%</b> | sub-category chapters             |                 |            |           |
| <b>NFR 1 - Energy</b>                           | <b>2.262,13</b> | <b>2.170,57</b> | <b>-91,55</b>  | <b>-4,05%</b> | sub-category chapters             |                 |            |           |
| 1.A.2.g vii                                     | 9,83            | 9,95            | 0,12           | 1,24%         | <a href="#">here</a>              |                 |            |           |
| 1.A.2.g viii                                    | 5,95            | 5,95            | 0,00           | 0,00%         | <a href="#">here</a>              |                 |            |           |
| 1.A.3.a i(i)                                    | 0,77            | 0,80            | 0,03           | 3,79%         | <a href="#">here</a>              |                 |            |           |
| 1.A.3.a ii(i)                                   | 1,75            | 0,50            | -1,25          | -71,55%       | <a href="#">here</a>              |                 |            |           |
| 1.A.3.b i                                       | 1.190,67        | 1.119,06        | -71,61         | -6,01%        | <a href="#">here</a>              |                 |            |           |
| 1.A.3.b ii                                      | 44,51           | 39,73           | -4,78          | -10,73%       | <a href="#">here</a>              |                 |            |           |
| 1.A.3.b iii                                     | 57,71           | 60,10           | 2,39           | 4,14%         | <a href="#">here</a>              |                 |            |           |
| 1.A.3.b iv                                      | 62,35           | 58,50           | -3,86          | -6,18%        | <a href="#">here</a>              |                 |            |           |

| absolute changes in emissions reported for 1990 |                 |                 |                |                | Submission 2020       | Submission 2021                   | Difference | Reasoning |
|---|-----------------|-----------------|----------------|----------------|-----------------------|-----------------------------------|------------|-----------|
|   |                 |                 |                |                |                       |                                   |            |           |
| NFR Code  | [kt]            |                 |                |                | relative              | see description and reasoning in: |            |           |
| <b>NATIONAL TOTAL</b>                           | <b>4.033,30</b> | <b>3.890,85</b> | <b>-142,45</b> | <b>-3,53%</b>  | sub-category chapters |                                   |            |           |
| <b>NFR 1 - Energy</b>                           | <b>2.262,13</b> | <b>2.170,57</b> | <b>-91,55</b>  | <b>-4,05%</b>  | sub-category chapters |                                   |            |           |
| 1.A.3.b v                                       | 214,70          | 201,42          | -13,28         | -6,18%         | <a href="#">here</a>  |                                   |            |           |
| 1.A.4.a ii                                      | 2,34            | 2,35            | 0,01           | 0,47%          | <a href="#">here</a>  |                                   |            |           |
| 1.A.4.b ii                                      | 12,22           | 12,48           | 0,26           | 2,09%          | <a href="#">here</a>  |                                   |            |           |
| 1.A.4.c ii                                      | 31,72           | 32,17           | 0,45           | 1,42%          | <a href="#">here</a>  |                                   |            |           |
| 1.B.2.a v                                       | 87,77           | 87,73           | -0,03          | -0,04%         |                       |                                   |            |           |
| <b>NFR 2 - IPPU</b>                             | <b>1.285,62</b> | <b>1.283,34</b> | <b>-2,28</b>   | <b>-0,18%</b>  | sub-category chapters |                                   |            |           |
| 2.G   | 3,90            | 1,62            | -2,28          | -58,42%        | <a href="#">here</a>  |                                   |            |           |
| <b>NFR 3 - Agriculture</b>                      | <b>447,13</b>   | <b>398,49</b>   | <b>-48,64</b>  | <b>-10,88%</b> | sub-category chapters |                                   |            |           |
| 3.B.1.a   | 231,88          | 196,61          | -35,27         | -15%           | <a href="#">here</a>  |                                   |            |           |
| 3.B.1.b   | 167,09          | 153,72          | -13,37         | -8,00%         | <a href="#">here</a>  |                                   |            |           |
| <b>NFR 5 - Waste</b>                            | <b>38,42</b>    | <b>38,45</b>    | <b>0,03</b>    | <b>0,07%</b>   | sub-category chapters |                                   |            |           |
| 5.D.2   | NA              | 0,03            | 0,03           |                | <a href="#">here</a>  |                                   |            |           |
| <b>NFR 6 - Other</b>                            | <b>NA</b>       |                 |                |                |                       |                                   |            |           |

Changes within the **National Total reported for 2018 (-15.31 kt | -1.34 %)** are dominated by decreased emission estimates **NFR 3**.

In **NFR 5**, emissions have been re-allocated with no impact on the sector's total emissions.

The strongest relative change occurs for **NFR 2.G with minus 50 %**.

Table 2: Changes in emission estimates for 2018

| absolute changes in emissions reported for 2018 |                 |                 |               |               | Submission 2020                                       | Submission 2021                   | Difference | Reasoning |
|---|-----------------|-----------------|---------------|---------------|---|-----------------------------------|------------|-----------|
|   |                 |                 |               |               |   |                                   |            |           |
| NFR Code  | [kt]            |                 |               |               | relative  | see description and reasoning in: |            |           |
| <b>NATIONAL TOTAL</b>                           | <b>1.140,32</b> | <b>1.125,02</b> | <b>-15,31</b> | <b>-1,34%</b> | <b>sub-category chapters</b>                          |                                   |            |           |
| <b>NFR 1 - Energy</b>                           | <b>210,09</b>   | <b>214,58</b>   | <b>4,49</b>   | <b>2,14%</b>  | <b>sub-category chapters</b>                          |                                   |            |           |
| 1.A.1.a   | 7,95            | 8,06            | 0,11          | 1,37%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.1.b   | 0,75            | 0,90            | 0,15          | 19,64%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.1.c   | 0,32            | 0,39            | 0,07          | 22,37%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.2.a   | 0,255           | 0,259           | 0,004         | 1,50%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.2.b   | 0,08            | 0,08            | 0,00          | 2,51%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.2.e   | 0,02            | 0,02            | 0,002         | 8,50%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.2.g vii                                     | 3,63            | 3,62            | -0,01         | -0,26%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.2.g viii                                    | 6,04            | 5,65            | -0,38         | -6,37%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.a i(i)                                    | 0,79            | 0,72            | -0,06         | -8,24%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.a ii(i)                                   | 0,56            | 0,49            | -0,07         | -12,86%       | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.b i                                       | 46,43           | 47,87           | 1,43          | 3,09%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.b ii                                      | 1,57            | 1,49            | -0,09         | -5,41%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.b iii                                     | 3,04            | 2,96            | -0,08         | -2,56%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.b iv                                      | 14,75           | 15,20           | 0,45          | 3,07%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.b v                                       | 19,73           | 20,26           | 0,53          | 2,67%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.c   | 0,42            | 0,36            | -0,06         | -15,42%       | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.d ii                                      | 1,08            | 1,19            | 0,11          | 10,50%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.3.e i                                       | 0,01            | 0,01            | 0,00          | 0,45%         | 1.A.3.e i - Pipeline Transport ] <a href="#">here</a> |                                   |            |           |
| 1.A.4.a i                                       | 3,82            | 3,42            | -0,40         | -10,52%       | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.a ii                                      | 1,14            | 0,90            | -0,24         | -21,08%       | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.b i                                       | 32,07           | 34,96           | 2,89          | 9,01%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.b ii                                      | 10,76           | 10,97           | 0,21          | 1,92%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.c i                                       | 0,79            | 0,78            | -0,01         | -1,47%        | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.c ii                                      | 9,39            | 9,45            | 0,07          | 0,69%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.4.c iii                                     | 0,130           | 0,134           | 0,004         | 2,70%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.5.a   | 0,06            | 0,06            | 0,00          | 1,28%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.A.5.b   | 1,11            | 1,11            | 0,00          | 0,01%         | <a href="#">here</a>                                  |                                   |            |           |
| 1.B.1.a   | 0,002           | 0,006           | 0,004         | 260%          | <a href="#">here</a>                                  |                                   |            |           |
| 1.B.2.a iv                                      | 12,27           | 12,27           | 0,00          | -0,01%        |   |                                   |            |           |
| 1.B.2.a v                                       | 16,71           | 16,60           | -0,11         | -0,66%        |   |                                   |            |           |
| 1.B.2.b   | 4,91            | 4,89            | -0,02         | -0,36%        |   |                                   |            |           |
| <b>NFR 2 - IPPU</b>                             | <b>586,01</b>   | <b>584,84</b>   | <b>-1,17</b>  | <b>-0,20%</b> | <b>sub-category chapters</b>                          |                                   |            |           |
| 2.G   | 2,25            | 1,12            | -1,13         | -50,27%       | <a href="#">here</a>                                  |                                   |            |           |
| 2.H.1   | 3,66            | 3,66            | 0,00          | 0,00%         | <a href="#">here</a>                                  |                                   |            |           |
| 2.H.2   | 15,78           | 15,74           | -0,04         | -0,22%        | <a href="#">here</a>                                  |                                   |            |           |
| <b>NFR 3 - Agriculture</b>                      | <b>324,31</b>   | <b>305,68</b>   | <b>-18,63</b> | <b>-5,74%</b> | <b>sub-category chapters</b>                          |                                   |            |           |
| 3.B.1.a   | 169,97          | 160,81          | -9,16         | -5,39%        | <a href="#">here</a>                                  |                                   |            |           |
| 3.B.1.b   | 101,42          | 91,95           | -9,47         | -9,34%        | <a href="#">here</a>                                  |                                   |            |           |

| absolute changes in emissions reported for 2018 |                 |                 |               |               | Submission 2020              | Submission 2021 | Difference      | Reasoning                                |
|---|-----------------|-----------------|---------------|---------------|------------------------------|-----------------|-----------------|--|
|   |                 |                 |               |               |                              |                 |                 |  |
| <b>NFR Code</b>                                 |                 |                 |               |               | <b>[kt]</b>                  |                 | <b>relative</b> | <b>see description and reasoning in:</b> |
| <b>NATIONAL TOTAL</b>                           | <b>1,140,32</b> | <b>1,125,02</b> | <b>-15,31</b> | <b>-1,34%</b> | <b>sub-category chapters</b> |                 |                 |  |
| <b>NFR 1 - Energy</b>                           | <b>210,09</b>   | <b>214,58</b>   | <b>4,49</b>   | <b>2,14%</b>  | <b>sub-category chapters</b> |                 |                 |  |
| <b>NFR 5 - Waste</b>                            | <b>19,91</b>    | <b>19,91</b>    | <b>0,00</b>   | <b>0,00%</b>  | <b>sub-category chapters</b> |                 |                 |  |
| 5.A   | 3,99            | 3,98            | -0,01         | 0,30%         | <a href="#">here</a>         |                 |                 |  |
| 5.D.2   | NA              | 0,01            | 0,01          |               | <a href="#">here</a>         |                 |                 |  |
| <b>NFR 6 - Other</b>                            |                 |                 |               |               | <b>NA</b>                    |                 |                 |  |