

Average Bond Energies (in kJ mol⁻¹)

| | C | N | S | O | I | Br | Cl | F | H |
|--|------------------|------------------|-----|------------------------------------|-----|-----|-----|-----|-----|
| H– | 414 | 389 | 368 | 464 | 297 | 368 | 431 | 569 | 435 |
| F– | 490 | 280 | 343 | 213 | 280 | 285 | 255 | 159 | |
| Cl– | 326 | 201 | 272 | 205 | 209 | 218 | 243 | | |
| Br– | 272 | 163 | 209 | --- | 176 | 192 | | | |
| I– | 218 | --- | --- | --- | 151 | | | | |
| O– | 326 | 230 | 423 | 142 | | | | | |
| O= | 803 ^a | 590 ^b | 523 | O ₂ is 495 ^d | | | | | |
| O≡ | 1075 | --- | --- | --- | | | | | |
| S– | 289 | --- | 247 | | | | | | |
| S= | 582 | --- | --- | | | | | | |
| N– | 285 | 159 | | | | | | | |
| N= | 515 | 473 | | | | | | | |
| N≡ | 858 | 946 | | | | | | | |
| C– | 331 | | | | | | | | |
| C= | 590 ^c | | | | | | | | |
| C≡ | 812 | | | | | | | | |
| ^a Value for CO ₂ ; 728 if –C=O | | | | | | | | | |
| ^b 406 if –NO ₂ | | | | | | | | | |
| 368 if –NO ₃ | | | | | | | | | |
| ^c 506 if alternating – and = | | | | | | | | | |
| ^d O ₂ is 495 | | | | | | | | | |