APPENDIX […] TO ENVIRONMENTAL AGREEMENT

**EXAMPLE CALCULATION OF ACTUAL ENERGY SAVINGS BASED ON DEGREE-DAY ADJUSTED NORMALISED HISTORICAL ENERGY CONSUMPTION**

**Degree day adjustment of energy consumption**

Registered energy consumption in existing buildings needs to be adjusted for climate-related changes in energy consumption. The term **degree day figure** is used in this context. This shall be calculated as the sum total of the difference between indoor temperature and outdoor temperature for all days of the heating season.

Number of degree days = 17⁰ C (reference indoor temperature) – outdoor temperature

Degree-day adjusted consumption = measured consumption x (normal degree days/measured degree days).

Degree day figures are found on, *inter alia*, the Enova website.

It is only the degree-day dependent share of energy consumption which shall be adjusted (for example not heated tap water).

**Calculation example**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Assumptions** |  |  |  |  |  |  |
| Degree-day dependent share of energy consumption | 0.8 |  |  |  |  |  |
| Average energy price 2012 – 2015 [NOK] | 0.60 |  |  |  |  |  |
| Energy price 2017 [NOK] | 0.65 |  |  |  |  |  |
|  |  |  |  | Energy Measures executed | |  |
|  |  |  |  | |  | | --- | |  | |  |  |
|  |  |  |  |  |  |  |
| Year | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** |
| kWh (measured) | 560,584 | 570,236 | 576,502 | 561,921 | 493,265 | 432,657 |
| Degree day figure, normal | 4,260 | 4,260 | 4,260 | 4,260 | 4,260 | 4,260 |
| Degree day figure, measured | 3,702 | 3,884 | 4,101 | 3,650 | 3,759 | 3,896 |
| Degree-day adjusted consumption (kWh) | 628,181 | 614,398 | 594,383 | 637,049 | 545,859 | 464,995 |
|  |  |  |  |  |  |  |
| Average degree-day adjusted energy consumption, 2012 - 2015 (kWh) | 618,503 |  |  |  |  |  |
| Average degree-day adjusted energy consumption, 2012 - 2015 (NOK) | 494,802 |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Annual actual energy savings 2017 (kWh)** | **153,508** |  |  |  |  |  |
| **Annual actual energy savings 2017 (NOK)** | **192,555** |  |  |  |  |  |