## Samfundsøkonomi, Fjernvarmeforsyning af St Heddinge

Samfundsøkonomi

**Diskonteringsrente** 3,5%

| | | Nuværdi | 0<br>2025 | 1<br>2026 | 2<br>2027 | 3<br>2028 | 4<br>2029 | 5<br>2030 | 6<br>2031 | 7<br>2032 | 8<br>2033 | 9<br>2034 | 10<br>2035 | 11<br>2036 | 12<br>2037 | 13<br>2038 | 14<br>2039 | 15<br>2040 | 16<br>2041 | 17<br>2042 | 18<br>2043 | 19<br>2044 | 20<br>2045 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Tilslutningsprocent** | | | | 60% | 63% | 66% | 69% | 72% | 74% | 77% | 80% | 83% | 86% | 86% | 86% | 86% | 86% | 86% | 86% | 86% | 86% | 86% | 86% |
| **Alternativ, Halmfyr** | | | | | | | | | | | | | | | | | | | | | | | |
| **Investeringer** | | | | | | | | | | | | | | | | | | | | | | | |
| Halmfyr | [ kr. ] | **58.737.131** | 58.737.131 | | | | | | | | | | | | | | | | | | | | |
| Spids- og reservelastkedel | [ kr. ] | **5.760.000** | 5.760.000 | | | | | | | | | | | | | | | | | | | | |
| Varmeakkumuleringstank | [ kr. ] | **4.800.000** | 4.800.000 | | | | | | | | | | | | | | | | | | | | |
| Fjernvarmeledninger | [ kr. ] | **140.474.863** | 140.474.863 | | | | | | | | | | | | | | | | | | | | |
| Stikledninger | [ kr. ] | **64.250.670** | 47.025.439 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | | | | | | | | | | | |
| Kundeinstallationer | [ kr. ] | **45.204.505** | 33.085.440 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | - | | | | | | | | | | |
| Scrapværdi, forsyningsledninger | [ kr. ] | **(42.358.724)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 84.284.918 |
| Scrapværdi, stikledninger | [ kr. ] | **(21.348.821)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 42.479.646 |
| Scrapværdi, kundeinstallationer | [ kr. ] | **(6.399.784)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 12.734.218 |
| Scrapværdi, halmfyr | [ kr. ] | **(5.903.856)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 11.747.426 |
| Scrapværdi, varmeakkumuleringstank | [ kr. ] | **(804.105)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 1.600.000 |
| Scrapværdi, spids- og reservelastkedel | [ kr. ] | **(578.956)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 1.152.000 |
| **Tilslutning til elnet** | [ kr. ] | **-** | | | | | | | | | | | | | | | | | | | | | |
| **Varmebehov** | | | | | | | | | | | | | | | | | | | | | | | |
| Varmebehov | [MWh] | **352.623** | | 19.106 | 20.026 | 20.946 | 21.866 | 22.786 | 23.706 | 24.626 | 25.546 | 26.466 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 |
| **Varmetab** | | | | | | | | | | | | | | | | | | | | | | | |
| Varmetab i nettet | [MWh] | **42.424** | | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 |
| **Brændselsomkostninger** | | | | | | | | | | | | | | | | | | | | | | | |
| Halmfyr, halm | [ kr. ] | **76.237.808** | | 4.077.411 | 4.266.249 | 4.456.611 | 4.658.780 | 4.852.567 | 5.058.924 | 5.256.138 | 5.466.682 | 5.679.510 | 5.882.054 | 5.919.760 | 5.944.897 | 5.970.034 | 5.995.171 | 6.020.308 | 6.032.876 | 6.058.013 | 6.058.013 | 6.058.013 | 6.058.013 |
| Spids- og reservelastkedler, naturgas | [ kr. ] | **18.706.246** | | 1.006.513 | 653.904 | 640.376 | 683.825 | 728.667 | 773.640 | 819.919 | 867.506 | 912.215 | 959.409 | 976.670 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 |
| **Drift og vedligehold** | | | | | | | | | | | | | | | | | | | | | | | |
| D&V halmfyr | [ kr. ] | **56.144.283** | | 3.839.583 | 3.857.450 | 3.875.316 | 3.893.182 | 3.911.048 | 3.928.915 | 3.946.781 | 3.964.647 | 3.982.513 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 | 4.000.380 |
| D&V spids- og reservelastkedler | [ kr. ] | **2.098.559** | | 141.653 | 142.621 | 143.589 | 144.558 | 145.526 | 146.494 | 147.462 | 148.430 | 149.399 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 |
| D&V ledningsnet | [ kr. ] | **5.197.177** | | 290.631 | 302.733 | 314.836 | 326.939 | 339.041 | 351.144 | 363.246 | 375.349 | 387.451 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 |
| D&V kundeinstallationer | [ kr. ] | **9.934.414** | | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 |
| D&V varmeakkumuleringstank | [ kr. ] | **182.302** | | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 |
| **CO2 omkostninger** | [ kr. ] | **3.480.447** | | 287.721 | 304.513 | 321.189 | 341.848 | 364.200 | 387.803 | 413.290 | 440.182 | 467.920 | 498.409 | 514.917 | - | - | - | - | - | - | - | - | - |
| **NOx, SO2, PM 2,5 omkostninger** | [ kr. ] | **1.205.026** | | 67.386 | 70.192 | 72.998 | 75.805 | 78.611 | 81.417 | 84.223 | 87.029 | 89.835 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 | 92.641 |
| **Forvridningstab** | [ kr. ] | **(1.153.953)** | - | 64.530 - | 67.217 - | 69.904 - | 72.592 - | 75.279 - | 77.966 - | 80.653 - | 83.340 - | 86.028 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 - | 88.715 |
| **Samlede omkostninger** | [ kr. ] | **413.865.232** | 289.882.873 | 14.215.381 | 14.099.459 | 14.324.025 | 14.621.357 | 14.913.396 | 15.219.383 | 15.519.420 | 15.835.499 | 16.151.830 | 12.605.922 | 12.677.396 | 13.395.867 | 13.421.004 | 13.446.141 | 13.471.278 | 13.483.847 | 13.508.984 | 13.508.984 | 13.508.984 - | 140.489.225 |
| **Alternativ, Halmfyr kraftvarme** | | | | | | | | | | | | | | | | | | | | | | | |
| **Investeringer** | | | | | | | | | | | | | | | | | | | | | | | |
| Halmfyr | [ kr. ] | **76.377.364** | 76.377.364 | | | | | | | | | | | | | | | | | | | | |
| Spids- og reservelastkedel | [ kr. ] | **5.760.000** | 5.760.000 | | | | | | | | | | | | | | | | | | | | |
| Varmeakkumuleringstank | [ kr. ] | **4.800.000** | 4.800.000 | | | | | | | | | | | | | | | | | | | | |
| Fjernvarmeledninger | [ kr. ] | **140.474.863** | 140.474.863 | | | | | | | | | | | | | | | | | | | | |
| Stikledninger | [ kr. ] | **64.250.670** | 47.025.439 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | 2.264.188 | | | | | | | | | | | |
| Kundeinstallationer | [ kr. ] | **45.204.505** | 33.085.440 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | 1.593.003 | - | | | | | | | | | | |
| Scrapværdi, forsyningsledninger | [ kr. ] | **(42.358.724)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 84.284.918 |
| Scrapværdi, stikledninger | [ kr. ] | **(21.348.821)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 42.479.646 |
| Scrapværdi, kundeinstallationer | [ kr. ] | **(6.399.784)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 12.734.218 |
| Scrapværdi, halmfyr | [ kr. ] | **(7.676.932)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 15.275.473 |
| Scrapværdi, varmeakkumuleringstank | [ kr. ] | **(804.105)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 1.600.000 |
| Scrapværdi, spids- og reservelastkedel | [ kr. ] | **(578.956)** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - 1.152.000 |
| **Tilslutning til elnet** | [ kr. ] | **2.636.800** | 2.636.800 | | | | | | | | | | | | | | | | | | | | |
| **Elsalg** | | | | | | | | | | | | | | | | | | | | | | | |
| Elsalg | [ kr. ] | **(28.311.322)** | - | 2.098.382 - | 2.023.440 - | 2.068.669 - | 2.070.186 - | 2.065.461 - | 1.967.069 - | 1.765.648 - | 1.826.504 - | 1.887.359 - | 1.948.214 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 - | 2.009.069 |
| **Varmebehov** | | | | | | | | | | | | | | | | | | | | | | | |
| Varmebehov | [MWh] | **352.623** | | 19.106 | 20.026 | 20.946 | 21.866 | 22.786 | 23.706 | 24.626 | 25.546 | 26.466 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 | 27.386 |
| **Varmetab** | | | | | | | | | | | | | | | | | | | | | | | |
| Varmetab i nettet | [MWh] | **42.424** | | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 | 2.985 |
| **Brændselsomkostninger** | | | | | | | | | | | | | | | | | | | | | | | |
| Halmfyr, halm | [ kr. ] | **91.308.073** | | 4.883.411 | 5.109.578 | 5.337.569 | 5.579.701 | 5.811.796 | 6.058.944 | 6.295.142 | 6.547.305 | 6.802.204 | 7.044.786 | 7.089.945 | 7.120.051 | 7.150.157 | 7.180.263 | 7.210.368 | 7.225.421 | 7.255.527 | 7.255.527 | 7.255.527 | 7.255.527 |
| Spids- og reservelastkedler, naturgas | [ kr. ] | **18.706.246** | | 1.006.513 | 653.904 | 640.376 | 683.825 | 728.667 | 773.640 | 819.919 | 867.506 | 912.215 | 959.409 | 976.670 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 | 2.184.921 |
| **Drift og vedligehold** | | | | | | | | | | | | | | | | | | | | | | | |
| D&V halmfyr | [ kr. ] | **53.382.752** | | 3.720.298 | 3.720.298 | 3.726.592 | 3.732.885 | 3.739.178 | 3.745.471 | 3.751.764 | 3.758.058 | 3.764.351 | 3.770.644 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 | 3.776.937 |
| D&V spids- og reservelastkedler | [ kr. ] | **2.098.559** | | 141.653 | 142.621 | 143.589 | 144.558 | 145.526 | 146.494 | 147.462 | 148.430 | 149.399 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 | 150.367 |
| D&V ledningsnet | [ kr. ] | **5.197.177** | | 290.631 | 302.733 | 314.836 | 326.939 | 339.041 | 351.144 | 363.246 | 375.349 | 387.451 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 | 399.554 |
| D&V kundeinstallationer | [ kr. ] | **9.934.414** | | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 | 698.996 |
| D&V varmeakkumuleringstank | [ kr. ] | **182.302** | | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 | 12.827 |
| **CO2 omkostninger** | [ kr. ] | **3.480.447** | | 287.721 | 304.513 | 321.189 | 341.848 | 364.200 | 387.803 | 413.290 | 440.182 | 467.920 | 498.409 | 514.917 | - | - | - | - | - | - | - | - | - |
| **NOx, SO2, PM 2,5 omkostninger** | [ kr. ] | **1.436.110** | | 80.309 | 83.653 | 86.997 | 90.341 | 93.686 | 97.030 | 100.374 | 103.718 | 107.062 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 | 110.407 |
| **Forvridningstab** | [ kr. ] | **(1.165.404)** | - | 65.170 - | 67.884 - | 70.598 - | 73.312 - | 76.026 - | 78.740 - | 81.454 - | 84.167 - | 86.881 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 - | 89.595 |
| **Samlede omkostninger** | [ kr. ] | **416.586.234** | 310.159.906 | 12.815.996 | 12.794.990 | 13.000.894 | 13.325.612 | 13.649.620 | 14.083.729 | 14.613.110 | 14.898.891 | 15.185.377 | 11.607.590 | 11.631.956 | 12.355.396 | 12.385.501 | 12.415.607 | 12.445.713 | 12.460.766 | 12.490.872 | 12.490.872 | 12.490.872 - | 145.035.383 |

| | | |
|---|---|---|
| **Samfundsøkonomisk fordel for projekt vs. halmfyr** | **[ kr. ]** | **33.017.457** |
| **Samfundsøkonomisk fordel for projekt vs. kraftvarme halmfyr** | **[ kr. ]** | **35.738.460** |