

## Communal Heating Centers

| Heating Center           | Location (Finland) | Boiler                  | Output MW | Delivery | Fuel                               |
|--------------------------|--------------------|-------------------------|-----------|----------|------------------------------------|
| Sysmä                    | Sysmä              | Grate combustion        | 3,0       | 2010     | wood chip                          |
| Itä-Savon lähienergia    | Kerimäki           | Grate combustion        | 0,8       | 2010     | wood chip                          |
| Pansion Lämpö            | Turku              | Gasification combustion | 7,0       | 2011     | wood chip, bark, sawdust, sod peat |
| Biowin Karelia Oy        | Kontiolahti        | Grate combustion        | 1,5       | 2010     | wood chip                          |
| Suomutunturi             | Suomutunturi       | Grate combustion        | 1,5       | 2010     | wood chip                          |
| Koski TL                 | Koski TL           | Grate combustion        | 1,5       | 2010     | wood chip                          |
| Lakiala                  | Ylöjärvi           | Grate combustion        | 1,5       | 2010     | wood chip                          |
| Alavus                   | Alavus             | Grate combustion        | 1,0       | 2010     | wood chip                          |
| Kiteen Lämpö Oy          | Kitee              | Gasification combustion | 5,0       | 2010     | wood chip, bark, sawdust, sod peat |
| Taipalsaari Biovin Oy    | Taipalsaari        | Grate combustion        | 1,0       | 2009     | wood chip                          |
| Kontiolinna              | Kontiolahti        | Grate combustion        | 1,0       | 2009     | wood chip                          |
| Kemijärven Kaukolämpö Oy | Pyhätunturi        | Grate combustion        | 1,5       | 2009     | wood chip                          |
| Sammatti                 | Sammatti           | Grate combustion        | 0,7       | 2009     | wood chip                          |
| Kainuun Energia          | Kajaani            | Grate combustion        | 1,3       | 2009     | wood chip                          |
| Lyly                     | Juupajoki          | Grate combustion        | 1,0       | 2009     | wood chip                          |
| Pyhäjoen kunta           | Pyhäjoki           | Gasification combustion | 2,5       | 2009     | wood chip, bark, sawdust, sod peat |
| Piippolan lämpö          | Piippola           | Gasification combustion | 1,25      | 2009     | wood chip, bark, sawdust, sod peat |
| Alahärmän Aluelämpö Oy   | Härmä              | Grate combustion        | 3,5       | 2009     | sod peat, wood chip                |
| Latva Energia Oy         | Muhos              | Grate combustion        | 1,2       | 2009     | wood chip                          |
| Kärkölä                  | Kärkölä            | Grate combustion        | 0,8       | 2009     | wood chip                          |
| Pansion Lämpö            | Turku              | Gasification combustion | 5,0       | 2009     | wood chip, bark, sawdust, sod peat |
| Euran Energia            | Eura               | Grate combustion        | 0,52      | 2008     | wood chip                          |
| Pännäinen                | Pännäinen          | Grate combustion        | 2,0       | 2008     | wood chip                          |
| Biowin Oy                | Muonio             | Grate combustion        | 1,0       | 2008     | wood chip, sod peat                |
| Biowin Oy                | Muonio             | Grate combustion        | 1,0       | 2008     | wood chip, sod peat                |
| Kaprakka                 | Liperi             | Gasification combustion | 1,0       | 2008     | wood chip, bark,                   |

|                              |               |                         |      |      |                                    |
|------------------------------|---------------|-------------------------|------|------|------------------------------------|
|                              |               |                         |      |      | sawdust, sod peat                  |
| Vapo Oy                      | Padasjoki     | Grate combustion        | 2,5  | 2008 | wood chip, sod peat                |
| Rovaniemen Energia Oy        | Ylläsjärvi    | Gasification combustion | 2,5  | 2008 | wood chip, bark, sawdust, sod peat |
| Pedersöre                    | Pedersöre     | Grate combustion        | 0,25 | 2008 | wood chip                          |
| Larsmo                       | Larsmo        | Grate combustion        | 0,3  | 2008 | wood chip                          |
| Nykarleby Kraftverk          | Uusikaarlepyy | Gasification combustion | 3,0  | 2008 | wood chip, bark, sawdust, sod peat |
| Vapo Oy                      | Liperi        | Grate combustion        | 2,5  | 2008 | wood chip, sod peat                |
| Viihinkilaakso               | Perniö        | Grate combustion        | 0,7  | 2008 | wood chip                          |
| Pelkosenniemi                | Pelkosenniemi | Grate combustion        | 1,2  | 2007 | wood chip                          |
| Alkkula                      | Ylitornio     | Grate combustion        | 0,7  | 2007 | wood chip                          |
| Savukoski                    | Savukoski     | Grate combustion        | 1,2  | 2007 | wood chip                          |
| Lakiston biolämpökeskus      | Espoo         | Gasification combustion | 3,0  | 2007 | wood chip, bark, sawdust           |
| Savon Voimalämpö Oy          | Iisalmi       | Grate combustion        | 0,63 | 2007 | pellet                             |
| Hauhon teollisuushallit      | Hauho         | Grate combustion        | 0,52 | 2007 | wood chip, sawdust                 |
| Miehikkälän kunta            | Miehikkälä    | Grate combustion        | 1,0  | 2007 | wood chip, sawdust                 |
| Hauhon teollisuuskiinteistöt | Hauho         | Grate combustion        | 0,52 | 2007 | wood chip, sawdust                 |
| Pöytyän lämpökeskus          | Riihikoski    | Gasification combustion | 2,0  | 2007 | wood chip, bark, sawdust           |
| Kojonkulman hake             | Metsämaa      | Grate combustion        | 0,52 | 2007 | wood chip                          |
| Kiskon kunta                 | Kisko         | Grate combustion        | 1,0  | 2007 | wood chip                          |
| As Oy Nopiala                | Janakkala     | Grate combustion        | 0,21 | 2007 | pellet                             |
| As Oy Nopiala                | Janakkala     | Grate combustion        | 0,16 | 2007 | pellet                             |
| Lillby                       | Pedersöre     | Grate combustion        | 0,3  | 2007 | wood chip                          |
| Edesvo                       | Pedersöre     | Grate combustion        | 0,45 | 2007 | wood chip                          |
| Salla                        | Salla         | Grate combustion        | 0,7  | 2007 | wood chip                          |
| Pexport                      | Lieto         | Grate combustion        | 0,6  | 2006 | pellet                             |
| Oy Hansa Ab                  | Mustasaari    | Grate combustion        | 0,33 | 2006 | pellet                             |
| Suomen Broiler               | Mustasaari    | Grate combustion        | 0,33 | 2006 | pellet                             |
| Latva Energia                | Pyhäntä       | Grate combustion        | 0,8  | 2006 | wood chip                          |
| Hirvensalmen Energia         | Hirvensalmi   | Grate combustion        | 1,0  | 2006 | wood chip                          |
| Rantsilan kunta              | Rantsila      | Gasification combustion | 2,0  | 2006 | wood chip, bark, sawdust, sod peat |

|                              |             |                         |       |      |                                    |
|------------------------------|-------------|-------------------------|-------|------|------------------------------------|
| Kuhmalahti                   | Kuhmalahti  | Grate combustion        | 0,8   | 2006 | wood chip                          |
| Kvelax Värmeservice          | Kvelax      | Grate combustion        | 0,325 | 2006 | wood chip                          |
| Teerijärven kunta            | Teerijärvi  | Grate combustion        | 1,2   | 2006 | wood chip                          |
| Enon energia                 | Eno         | Grate combustion        | 1,0   | 2005 | wood chip                          |
| Petolahti, koulu             | Petolahti   | Grate combustion        | 0,7   | 2006 | wood chip                          |
| Suodenniemen kunta           | Suodenniemi | Grate combustion        | 0,52  | 2005 | wood chip                          |
| Säkylän aluelämpö            | Säkylä      | Gasification combustion | 2,5   | 2006 | wood chip, bark, sawdust, sod peat |
| Kristillinen opisto          | Ranua       | Grate combustion        | 0,3   | 2005 | wood chip                          |
| Vesa Kinnunen                | Toholampi   | Grate combustion        | 0,7   | 2005 | wood chip                          |
| Porvoon Energia Oy           | Loviisa     | Gasification combustion | 7,0   | 2005 | wood chip                          |
| Kuortaneen Energia           | Kuortane    | Grate combustion        | 1,2   | 2004 | wood chip                          |
| Vasikka-aho                  | Evijärvi    | Grate combustion        | 0,3   | 2004 | wood chip                          |
| Koulukeskus                  | Evijärvi    | Grate combustion        | 0,5   | 2004 | wood chip                          |
| Kodisjoen kunta              | Kodisjoki   | Grate combustion        | 0,52  | 2004 | wood chip                          |
| Reisjärven puuenergia        | Reisjärvi   | Grate combustion        | 1,0   | 2004 | wood chip, sawdust                 |
| Ese-tekniikka / Anttolanhovi | Anttola     | Grate combustion        | 0,6   | 2004 | wood chip                          |
| Savitaipaleen kunta          | Savitaipale | Grate combustion        | 0,7   | 2004 | wood chip                          |
| Ruskan päiväkot              | Nakkila     | Grate combustion        | 0,7   | 2004 | wood chip                          |
| Enon kunta                   | Eno         | Grate combustion        | 1,2   | 2004 | wood chip                          |
| Enon kunta                   | Eno         | Grate combustion        | 0,8   | 2004 | wood chip                          |
| Koulukeskus                  | Hirvensalmi | Grate combustion        | 1,0   | 2004 | wood chip                          |
| Aseman seudun koulu          | Alavus      | Grate combustion        | 0,3   | 2004 | wood chip                          |
| Tervolan kunta               | Tervola     | Gasification combustion | 2,5   | 2004 | wood chip, bark, sawdust, sod peat |
| Annatapion koulu             | Luopioinen  | Grate combustion        | 0,7   | 2003 | wood chip, pellet                  |
| Vilppula                     | Vilppula    | Grate combustion        | 1,0   | 2003 | wood chip                          |
| Virtasalmi                   | Virtasalmi  | Grate combustion        | 1,0   | 2003 | wood chip                          |
| Kurun Hakelämpö              | Kuru        | Grate combustion        | 0,52  | 2003 | wood chip                          |
| Hauhon lämpökeskus           | Hauho       | Gasification combustion | 2,0   | 2003 | wood chip, bark, sawdust, sod peat |
| Tuusulan Energia             | Tuusula     | Gasification combustion | 2,5   | 2003 | wood chip, bark, sawdust           |
| Ristiinan Bioenergia Oy      | Ristiina    | Gasification combustion | 1,0   | 2003 | wood chip, bark, sawdust           |

|                                     |             |                         |      |      |                                       |
|-------------------------------------|-------------|-------------------------|------|------|---------------------------------------|
| Joenniskan lämpö                    | Kannonkoski | Grate combustion        | 0,3  | 2002 | wood chip                             |
| Teuvan kunta                        | Teuva       | Grate combustion        | 1,0  | 2002 | sod peat                              |
| Kangasniemen vanhainkoti            | Kangasniemi | Grate combustion        | 1,0  | 2002 | wood chip                             |
| Ruoveden kunta                      | Ruovesi     | Grate combustion        | 0,5  | 2002 | wood chip                             |
| Polvijärven hake ja turve           | Polvijärvi  | Grate combustion        | 0,12 | 2002 | wood chip, sod peat                   |
| Halsuan kunta                       | Halsua      | Grate combustion        | 0,7  | 2002 | wood chip                             |
| Bovallius säätiö                    | Pieksämäki  | Grate combustion        | 0,3  | 2002 | wood chip                             |
| Enon kunta                          | Eno         | Grate combustion        | 1,0  | 2002 | wood chip                             |
| Markku Rita-Kasari                  | Jalasjärvi  | Grate combustion        | 0,5  | 2003 | wood chip                             |
| Pieksämäen<br>Metsäoppilaitos       | Pieksämäki  | Grate combustion        | 0,5  | 2002 | wood chip                             |
| Heikinkoti                          | Hirvensalmi | Grate combustion        | 0,95 | 2002 | wood chip                             |
| Maunulan palvelukoti                | Toholampi   | Grate combustion        | 0,29 | 2002 | wood chip                             |
| Mustasaaren kunta                   | Mustasaari  | Grate combustion        | 0,46 | 2001 | wood chip                             |
| Soinilan koulu                      | Mikkeli     | Grate combustion        | 0,36 | 2001 | wood chip                             |
| Tuupovaaran kunta                   | Tuupovaara  | Grate combustion        | 0,6  | 2001 | wood chip                             |
| Alastaron Aluelämpö Oy              | Alastaro    | Grate combustion        | 0,6  | 2001 | wood chip                             |
| Hirvensalmen kunta                  | Hirvensalmi | Grate combustion        | 1,0  | 2001 | wood chip                             |
| Askolan Kaukolämpö Oy               | Askola      | Gasification combustion | 1,25 | 2000 | wood chip, bark,<br>sawdust, sod peat |
| Pornaisten kunta                    | Pornainen   | Gasification combustion | 1,25 | 2000 | wood chip, bark,<br>sawdust, sod peat |
| Sykäke Oy                           | Syväraäinen | Grate combustion        | 0,21 | 2000 | wood chip                             |
| Enon kunta                          | Eno         | Grate combustion        | 0,8  | 2000 | wood chip                             |
| Sievin seurakunta                   | Sievi       | Grate combustion        | 0,52 | 2000 | wood chip                             |
| Alavuden kaukolämpö                 | Alavus      | Grate combustion        | 0,52 | 2000 | wood chip                             |
| Kyrön Energiaosuuskunta             | Isokyrö     | Grate combustion        | 0,46 | 1999 | wood chip                             |
| Hirvensalmen kunta /<br>Virastotalo | Hirvensalmi | Grate combustion        | 0,52 | 1999 | wood chip                             |
| Pedersöre kommun                    | Pietarsaari | Grate combustion        | 1,0  | 1998 | wood chip                             |
| Vanhainkoti                         | Pertunmaa   | Grate combustion        | 0,5  | 1998 | wood chip                             |
| Urjalan kunnan ala-aste             | Urjala      | Grate combustion        | 0,29 | 1998 | wood chip                             |
| Savonrannan kunta                   | Savonranta  | Grate combustion        | 0,42 | 1998 | wood chip                             |
| Uudenkaarlepyyn kaupunki            | Jepua       | Grate combustion        | 0,52 | 1998 | wood chip                             |
| Ruoveden kunta                      | Ruovesi     | Grate combustion        | 0,5  | 1997 | wood chip                             |

|                         |               |                         |          |           |                                    |
|-------------------------|---------------|-------------------------|----------|-----------|------------------------------------|
| Karstulan kunta         | Karstula      | Grate combustion        | 1,0      | 1997      | wood chip                          |
| Tuupovaaran kunta       | Tuupovaara    | Grate combustion        | 0,6      | 1997      | wood chip                          |
| Naturbruksinstitut      | Inkoo         | Grate combustion        | 0,7      | 1997      | wood chip                          |
| Lohilahden koulu        | Sulkava       | Grate combustion        | 0,33     | 1997      | wood chip                          |
| Kruunupyyn kunta        | Teerijärvi    | Grate combustion        | 0,36     | 1996      | wood chip                          |
| Kurun kunta             | Kuru          | Grate combustion        | 0,52     | 1996      | wood chip                          |
| Karstulan kunta         | Karstula      | Grate combustion        | 0,7      | 1997      | wood chip                          |
| Siikaisten kunta        | Siikainen     | Grate combustion        | 1,0      | 1997      | wood chip                          |
| Esbio                   | Bäckby        | Grate combustion        | 0,52     | 1995      | wood chip                          |
| Perhon kunta            | Perho         | Gasification combustion | 1,4      | 1994      | wood chip, bark, sawdust, sod peat |
| Iin kunta               | Ii            | Gasification combustion | 1,6      | 1993      | wood chip, bark, sawdust, sod peat |
| Ranuan Lämpö Oy         | Ranua         | Grate combustion        | 1,4      | 1994      | wood chip, sod peat                |
| Vuorelan teollisuusalue | Vuorela       | Grate combustion        | 0,84     | 1990      | wood chip                          |
| Piippolan kunta         | Piippola      | Grate combustion        | 0,58     | 1988      | wood chip, sawdust                 |
| PLM Pirkkala            | Pirkkala      | Gasification combustion | 2,0      | 1985      | sod peat                           |
| PLM Pirkkala            | Pirkkala      | Gasification combustion | 2,0      | 1985      | sod peat                           |
| PLM Kontioranta         | Kontioranta   | Gasification combustion | 2,0      | 1985      | sod peat                           |
| PLM Nokia               | Nokia         | Gasification combustion | 1,6      | 1984      | wood chip                          |
| Olostunturin hotelli    | Muonio        | Gasification combustion | 0,36     | 1984      | wood chip                          |
| Meltauksen ala-aste     | Rovaniemi mlk | Gasification combustion | 0,54     | 1983      | wood chip                          |
| VAPO n. 20 kpl          | Turveasemia   | Gasification combustion | 0,15–0,4 | 1980–1985 | sod peat                           |