

From: Finnish Ministry of Employment and the Economy

To: European Commission, DG ENER C3

Date: 18 December 2013

**Subject: Notification TEM/2626/03.02.02/2013**

**NOTIFICATION PURSUANT TO ARTICLE 5(6) OF THE ENERGY EFFICIENCY DIRECTIVE (2012/27/EU) ON THE ALTERNATIVE APPROACH ADOPTED BY FINLAND**

Article 5 of the Energy Efficiency Directive requires the Member States to ensure that, by 1 January 2014, 3% of the total floor area of heated and/or cooled buildings owned and occupied by its central government is renovated each year to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU.

The 3% rate is calculated on the total floor area of such buildings with a total useful floor area over 500 m<sup>2</sup> that, on 1 January of each year, do not meet the national minimum energy performance requirements set in application of Article 4 of Directive 2010/31/EU. That threshold will be lowered to 250 m<sup>2</sup> as of 9 July 2015.

Member States may decide not to set or apply the requirements to officially protected buildings or to buildings owned by the armed forces or central government and serving national defence purposes other than single living quarters or office buildings occupied by personnel.

A Member State may opt for an alternative approach to Article 5(1)-(5), whereby it takes other cost-effective measures to achieve, by 2020, energy savings that are at least equivalent to the 3% that would be achieved through renovations, reported on an annual basis.

Member States that opt to implement Article 5 with an alternative approach pursuant to paragraph 6 are required to notify the Commission by 31 December 2013 at the latest of the alternative measures that they plan to adopt, showing how they would achieve an equivalent improvement in the energy performance of the buildings within the central government estate.

Finland hereby provides notification of the alternative approach it has opted for under paragraph 6 to implement Article 5.

1. Building stock owned and occupied by central government within the meaning of Article 5(1) and (2) of the Energy Efficiency Directive and its energy use

The list of central government buildings under Article 5 of the Energy Efficiency Directive was drawn up on a one-off basis, with buildings subject to rental contracts entered into by State entities considered part of central government (as listed in point 4 below) being counted among the central government's building stock. Where the floor area rented by central government organisations accounts for more than half of the entire rented area of a building, the entire building in question has been deemed to be a building occupied by central government.

The armed forces in their entirety are part of central government. Living quarters and office buildings occupied by personnel of the armed forces within the meaning of Article 5(2)(b) have thus been included in the list of buildings.

The portfolios of State-owned property companies have been included on the list of buildings where the State exercises significant control over those companies.

The requirements under Directive 2010/31/EU for improving the energy performance of buildings through renovation and alterations have been transposed at national level (Decree No 4/2013 of the Minister for the Environment). The national Decree includes four alternative minimum energy performance requirements for existing buildings, in line with their state of repair. The energy consumption figures laid down in Section 6 of the Decree and shown below, broken down by building class, can be used as the baseline for compliance with the minimum requirements. Buildings with lower figures are thus not subject to the 3% renovation requirement under Article 5(1) of the Energy Efficiency Directive.

- blocks of flats	130kWh/m <sup>2</sup>
- office buildings	145kWh/m <sup>2</sup>
- educational buildings	150kWh/m <sup>2</sup>

The 237 buildings owned and occupied by central government have a combined floor area of 884 000 m<sup>2</sup> and annual energy consumption of 178 GWh.

## 2. Calculation of the energy saving impact of the 3% renovation option

Standard values, as mentioned in the Energy Efficiency Directive, for energy consumption by reference central government buildings have not been set at national level. The energy saving that could be achieved by means of renovations in accordance with Article 5(1)-(5) has been calculated on the basis of the following minimum requirements for total energy consumption laid down, by building class, in Section 7 of Decree No 4/2013 of the Minister for the Environment.

- blocks of flats	-15%
- office buildings	-30 %
- educational buildings	-20 %

The requirements of the Decree do not apply to protected buildings. However, while such buildings have not been left off the list of buildings, their energy efficiency improvement potential has been estimated at 50% of the above minimum requirements.

The savings that would be achieved through renovation of central government buildings have been calculated by taking current energy consumption, as per the energy performance certificate, in each individual central government building and multiplying it by the energy consumption reduction coefficients under Decree No 4/2013 of the Minister for the Environment. The energy saving that would be achieved through renovation of the entire building stock has been calculated by adding together the savings for individual buildings.

The energy savings target for 2014 under Article 5(6) of the Energy Efficiency Directive is 3% of the energy saving that would be achieved by renovating the entire building stock. The savings requirements for subsequent years will always be 97% of the savings target for the year preceding the year in question. The overall savings target for 2020 is the sum of the annual savings for the 2014-20 period.

Renovating all central government buildings would give an annual energy saving of 42 844 MWh. Accordingly, an energy saving equivalent to 3% of the total floor area is 1 285 MWh ( $0.03 \times 42\,844$ ). The annual energy saving targets for central government buildings in accordance with Article 5(6) of the Energy Efficiency Directive are set out in Table 1.

Table 1 Energy saving target under Article 5 of the Energy Efficiency Directive for the 2014-20 period

Year	Saving (MWh)
2014	1 285
2015	2 531
2016	3 741
2017	4 913
2018	6 051
2019	7 154
<b>2020</b>	<b>8 225</b>

### 3. Alternative measures and the resulting energy efficiency improvement

Senate Properties (the State's unincorporated property company) and Puolustushallinnon Rakennuslaitos (the authority responsible for managing defence force properties) have signed up to the commercial property energy efficiency agreement, under which most of the energy saving measures are reported upon.

1. A system of penalties and bonuses will be included in contracts entered into with property management companies, with one of the components being a thermal energy saving. This agreement covers 75% of central government properties. The estimated annual saving is 450 MWh.

2. Building users will be informed and given guidance through 'user electricity projects'. Under these projects, guidance will also be provided to the property manager and operation of the automated system will be checked. The annual coverage of such projects will be about 10% of central government buildings. The estimated annual saving on electricity consumption is 350 MWh, with a 100 MWh saving in thermal energy consumption.

3. Energy renovation measures during maintenance/upkeep will be scheduled annually in sufficient numbers, with the best projects in terms of repayment periods being prioritised. Renovations will be self-financed or based on the ESCO model. The estimated annual overall energy saving is 200 MWh.

4. Technical operational guidance and remote monitoring will be carried out on an ongoing basis. The estimated annual saving, excluding any overlapping with the previous points, is 140 MWh.

5. Each year some central government buildings will be inspected to establish their electricity consumption during down time when they are not in use. Significant savings will be achievable at the individual locations. The estimated overall annual savings are estimated at 40 MWh of electricity and 5 MWh of thermal energy.

6. Space efficiency will be improved without exception when tenants are deciding on their spatial arrangements. Energy savings will be achieved alongside improved space efficiency, as unneeded spaces will be given up and either re-assigned to other uses, sold or demolished. An advance assessment of the annual energy savings is not possible. Changes to the administration's space efficiency will be monitored throughout the country, as regards the various areas of administration, individual tenants and buildings.

7. Rental contracts being renewed will take the form of Green Lease contracts.

8. In accordance with a Government decision in principle, all central government entities will have to have an energy efficiency plan in operation in 2014. Measures concerning the electricity consumption of buildings and users and the resulting energy savings partially overlap with the points set out above. The plans also include activities other than those linked to building energy use.

The energy saving impact of the above measures will be at least in line with the target set in the Decree (1 285 MWh). According to statistical information, the energy savings in recent years have been on average 30% higher than the 3% renovation-based target set.

#### 4. Central government entities

As defined, the Article 5 requirements apply to the following government entities whose remit extends over Finland's entire territory.

#### OFFICE OF THE CHANCELLOR OF JUSTICE

##### MINISTRY OF TRANSPORT AND COMMUNICATIONS

- Finnish Transport Agency
- Finnish Transport Safety Agency
- Finnish Communications Regulatory Authority

##### MINISTRY OF AGRICULTURE AND FORESTRY

- Finnish Food Safety Authority
- Veterinary Mediation Board
- National Land Survey
- Finnish Agency for Rural Affairs
- Information Centre of the Ministry of Agriculture and Forestry
- Appeal Board for Rural Affairs

##### MINISTRY OF JUSTICE

- Supreme Court
- Supreme Administrative Court
- Market Court
- Labour Court
- Insurance Court
- Office of the Bankruptcy Ombudsman
- Legal Register Centre
- Safety Investigation Authority
- Office of the Data Protection Ombudsman
- Office of the Prosecutor General
- Criminal Sanctions Agency

- National Administrative Office for Enforcement

#### MINISTRY OF EDUCATION AND CULTURE

- Finnish National Board of Education
- National Board of Antiquities
- National Archives Service

#### MINISTRY OF DEFENCE

- Finnish Defence Forces

#### MINISTRY OF THE INTERIOR

- National Police Board
- National Bureau of Investigation
- Finnish Security Intelligence Service
- Emergency Response Centre Administration
- Finnish Immigration Service
- Reception centres for asylum seekers
- Finnish Border Guard
- Office of the Ombudsman for Minorities
- National Discrimination Tribunal of Finland

#### MINISTRY OF SOCIAL AFFAIRS AND HEALTH

- Finnish Medicines Agency
- National Supervisory Authority for Welfare and Health
- Social Security Appeal Board
- Radiation and Nuclear Safety Authority
- National Institute for Health and Welfare
- Unemployment Appeal Board

#### MINISTRY OF EMPLOYMENT AND THE ECONOMY

- Energy Authority
- National Emergency Supply Agency
- Finnish Competition and Consumer Authority
- Centre for Metrology and Accreditation
- Finnish Patent and Registration Office
- Tekes - Finnish Funding Agency for Innovation
- Finnish Safety and Chemicals Agency
- National Conciliator's Office
- Labour Council

#### MINISTRY OF FOREIGN AFFAIRS PRIME MINISTER'S OFFICE

#### MINISTRY OF FINANCE

- Statistics Finland
- Finnish Customs
- State Treasury
- Tax Administration
- Population Register Centre

#### MINISTRY OF THE ENVIRONMENT

- Finnish Environment Institute

- Housing Finance and Development Centre of Finland