### Regulatory energy performance requirements for Technical Building Systems (TBS)

<table>
<thead>
<tr>
<th>Building type:</th>
<th>Space heating</th>
<th>Water heating</th>
<th>A/C</th>
<th>Ventilation</th>
<th>Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXIST, NEW</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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</tbody>
</table>

**Q1.** Do you have regulations for a minimum standard of energy performance for technical building systems?

**Q2a.** In new and existing buildings, do the regulations apply to installation of NEW technical building systems?

**Q2b.** If the requirements for new buildings and existing buildings differ, explain (in a few words) why and how they differ?

**Q2c.** In existing buildings, do the regulations apply to REPLACEMENT of technical building systems?

**Q2d.** In existing buildings, do the regulations apply to UPGRADE (e.g., enlargement or reconﬁguration of the system, or replacement of main components) of technical building systems?

**Q3a.** Do the regulations require a speciﬁed standard or method for dimensioning?

**Q3b.** ... if so, data about the building is normally needed to determine the maximum demand for service. How is data about the building obtained?

**Q4a.** Do the regulations require energy performance to be calculated for each installation?

**Q4b.** ... if so, data about the building is normally needed to determine the typical annual demand for service. How is data about the building obtained (if diﬀerently from Q3b)?

**Q5.** Do the regulations require a speciﬁed standard or method for installation?

**Q6.** Are there deﬁned requirements for adjustment (or commissioning)?

**Q7.** Do the regulations require a speciﬁed standard or method for control?

**Q8a.** Are the standards and methods always applied, or only when they are technically, economically and functionally feasible?

**Q8b.** ... if applied only when "technically, economically and functionally feasible", do you specify how that condition is to be determined?

**Q9a.** Do regulations "... encourage the introduction of intelligent metering systems whenever a building is constructed or undergoes major renovation?"

**Q9b.** ... if not included in regulations, is there any other form of encouragement for intelligent metering?

**Q10a.** Do regulations "... encourage the installation of active control systems such as automation, control and monitoring systems that aim to save energy?"

**Q10b.** ... if not included in regulations, is there any other form of encouragement for active control systems?

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1) Only requirements to the replaced part and must at least comply with requirements valid for the date of building construction. 2) For safety issues only. 3) Only functional requirements for the systems. 4) Companies and energy suppliers have interest in implementing intelligent meters and market penetration is rapidly increasing. 5) Widely spread, driven by the market.