```xml
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
    - <xs:element name="ape2015">
        - <xs:annotation>
                <xs:documentation>Attestato di Prestazione Energetica degli Edifici
                    2015</xs:documentation>
            </xs:annotation>
        - <xs:complexType>
            + <xs:sequence>
            </xs:complexType>
        </xs:element>
    - <xs:simpleType name="typeCodiceISTATRegione">
        - <xs:annotation>
                <xs:documentation>Codice ISTAT della Regione o Provincia Autonoma di
                    competenza</xs:documentation>
            </xs:annotation>
        - <xs:restriction base="xs:string">
                <xs:length value="2"/>
                <xs:pattern value="[0-9][0-9]"/>
            </xs:restriction>
        </xs:simpleType>
    - <xs:complexType name="typeInfo">
        - <xs:sequence>
                <xs:element name="copyright" type="xs:string" fixed="FORMATO XML
                    APE2015 STANDARD NAZIONALE"/>
                <xs:element name="versione" type="xs:string" fixed="12.00"/>
            </xs:sequence>
        </xs:complexType>
    - <xs:complexType name="typeDatiAttestato">
        - <xs:annotation>
                <xs:documentation>DATI obbligatori per l'invio al SIAPE</xs:documentation>
            </xs:annotation>
        - <xs:sequence>
            - <xs:element name="codiceISTATRegione" type="typeCodiceISTATRegione">
                - <xs:annotation>
                        <xs:documentation>Codice ISTAT della Regione (01...20) o della
                            Provincia autonoma (Bolzano=21 e Trento=22)</xs:documentation>
                    </xs:annotation>
                </xs:element>
            - <xs:element name="codiceIdentificativo">
                - <xs:annotation>
                        <xs:documentation>ID dell'APE attribuito dalla Regione di
                            competenza</xs:documentation>
                    </xs:annotation>
                - <xs:simpleType>
                    - <xs:restriction base="xs:string">
                            <xs:maxLength value="36"/>
                        </xs:restriction>
                    </xs:simpleType>
                </xs:element>
            - <xs:element name="dataScadenza" type="xs:date">
                - <xs:annotation>
```

```xml
            <xs:documentation>Data di scadenza dell'APE attribuita dalla Regione di
                competenza</xs:documentation>
        </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="typeDatiCatastali">
  <xs:sequence>
    <xs:element name="codiceCatastale">
      <xs:annotation>
        <xs:documentation>Codice CATASTALE del
            Comune</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:length value="4"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="comuneCatastale">
      <xs:annotation>
        <xs:documentation>Denominazione del Comune
            CATASTALE</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="255"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="tipoCatasto" default="1">
      <xs:annotation>
        <xs:documentation>0=Catasto Terreni 1=Catasto Fabbricati 2=Catasto
            Tavolare</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:unsignedByte">
          <xs:minInclusive value="0"/>
          <xs:maxInclusive value="2"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="sezione" minOccurs="0">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="255"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="foglio">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="255"/>
```

```xml
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
        - <xs:element name="particella">
            - <xs:annotation>
                    <xs:documentation>In caso di Catasto Tavolare inserire il Numero
                        Immobile</xs:documentation>
                </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                        <xs:maxLength value="255"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
        - <xs:element name="subalterni" minOccurs="0">
            - <xs:complexType>
                - <xs:sequence maxOccurs="4">
                        <xs:element name="subDA" type="typeSubalterno"/>
                        <xs:element name="subA" type="typeSubalterno"/>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
            <xs:element name="altriSubalterni" type="typeSubalterno" minOccurs="0"
                maxOccurs="20"/>
        </xs:sequence>
    </xs:complexType>
- <xs:simpleType name="typeIndicePrestazione">
    - <xs:restriction base="xs:decimal">
            <xs:fractionDigits value="2"/>
        </xs:restriction>
    </xs:simpleType>
- <xs:complexType name="typeClasseEnergetica">
    - <xs:sequence>
        - <xs:element name="classeEnergetica">
            - <xs:annotation>
                    <xs:documentation>A4, A3, A2, A1, B, C, D, E, F, G</xs:documentation>
                </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                        <xs:minLength value="1"/>
                        <xs:maxLength value="2"/>
                        <xs:enumeration value="A4"/>
                        <xs:enumeration value="A3"/>
                        <xs:enumeration value="A2"/>
                        <xs:enumeration value="A1"/>
                        <xs:enumeration value="B"/>
                        <xs:enumeration value="C"/>
                        <xs:enumeration value="D"/>
                        <xs:enumeration value="E"/>
                        <xs:enumeration value="F"/>
                        <xs:enumeration value="G"/>
                    </xs:restriction>
                </xs:simpleType>
```

```xml
            </xs:element>
            <xs:element name="epglnren" type="typeIndicePrestazione"/>
        </xs:sequence>
    </xs:complexType>
-   <xs:simpleType name="typeConsumoAnnuo">
    -   <xs:restriction base="xs:decimal">
            <xs:minInclusive value="0"/>
            <xs:fractionDigits value="0"/>
        </xs:restriction>
    </xs:simpleType>
-   <xs:simpleType name="typeConsumoAnnuoUM">
    -   <xs:annotation>
            <xs:documentation>0=Nm³ (opzione non utilizzabile dopo il 31/12/2016), 1=l
                (opzione non utilizzabile dopo il 31/12/2016), 2=kg, 3=kWh,
                4=Sm³</xs:documentation>
        </xs:annotation>
    -   <xs:restriction base="xs:unsignedByte">
            <xs:minInclusive value="0"/>
            <xs:maxInclusive value="4"/>
        </xs:restriction>
    </xs:simpleType>
-   <xs:complexType name="typeConsumoImpianto">
    -   <xs:sequence>
        -   <xs:element name="consumoAnnuo" type="typeConsumoAnnuo">
            -   <xs:annotation>
                    <xs:documentation>Quantità annua consumata in uso
                        standard</xs:documentation>
                </xs:annotation>
            </xs:element>
            <xs:element name="consumoAnnuoUM" type="typeConsumoAnnuoUM"/>
        </xs:sequence>
    </xs:complexType>
-   <xs:complexType name="typeConsumoImpiantoAltro">
    -   <xs:sequence>
        -   <xs:element name="consumoAnnuo" type="typeConsumoAnnuo">
            -   <xs:annotation>
                    <xs:documentation>Quantità annua consumata in uso
                        standard</xs:documentation>
                </xs:annotation>
            </xs:element>
            <xs:element name="consumoAnnuoUM" type="typeConsumoAnnuoUM"/>
        -   <xs:element name="descrizioneFonteEnergetica">
            -   <xs:annotation>
                    <xs:documentation>Descrizione della Fonte
                        Energetica</xs:documentation>
                </xs:annotation>
            -   <xs:simpleType>
                -   <xs:restriction base="xs:string">
                        <xs:minLength value="0"/>
                        <xs:maxLength value="100"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
```

```xml
            </xs:sequence>
        </xs:complexType>
        <xs:complexType name="typeInterventoRaccomandato">
            <xs:sequence>
                <xs:element name="codice">
                    <xs:annotation>
                        <xs:documentation>0=REN1 1=REN2 2=REN3 3=REN4 4=REN5
                            5=REN6 </xs:documentation>
                    </xs:annotation>
                    <xs:simpleType>
                        <xs:restriction base="xs:unsignedByte">
                            <xs:minInclusive value="0"/>
                            <xs:maxInclusive value="5"/>
                        </xs:restriction>
                    </xs:simpleType>
                </xs:element>
                <xs:element name="tipoInterventoRaccomandato">
                    <xs:simpleType>
                        <xs:restriction base="xs:string">
                            <xs:maxLength value="255"/>
                        </xs:restriction>
                    </xs:simpleType>
                </xs:element>
                <xs:element name="ristrutturazioneImportante" type="xs:boolean" default="0"/>
                <xs:element name="tempoRitornoInvestimento" default="1">
                    <xs:annotation>
                        <xs:documentation>espresso in anni</xs:documentation>
                    </xs:annotation>
                    <xs:simpleType>
                        <xs:restriction base="xs:decimal">
                            <xs:fractionDigits value="2"/>
                            <xs:minInclusive value="0"/>
                        </xs:restriction>
                    </xs:simpleType>
                </xs:element>
                <xs:element name="classificazioneRaggiungibile" type="typeClasseEnergetica"/>
            </xs:sequence>
        </xs:complexType>
        <xs:simpleType name="typePrestazioneFabbricato">
            <xs:annotation>
                <xs:documentation>0=SORRIDENTE (alta); 1=MEDIA (media); 2=TRISTE (bassa)
                    </xs:documentation>
            </xs:annotation>
            <xs:restriction base="xs:unsignedByte">
                <xs:minInclusive value="0"/>
                <xs:maxInclusive value="2"/>
            </xs:restriction>
        </xs:simpleType>
        <xs:complexType name="typePrestazioneGlobale">
            <xs:sequence>
                <xs:element name="prestazioneEnergeticaFabbricato">
                    <xs:complexType>
                        <xs:sequence>
```

```xml
<xs:element name="inverno" type="typePrestazioneFabbricato">
    <xs:annotation>
        <xs:documentation>0=SORRIDENTE (alta) 1=MEDIA (media) 2=TRISTE (bassa)</xs:documentation>
    </xs:annotation>
</xs:element>
<xs:element name="estate" type="typePrestazioneFabbricato">
    <xs:annotation>
        <xs:documentation>0=SORRIDENTE (alta) 1=MEDIA (media) 2=TRISTE (bassa)</xs:documentation>
    </xs:annotation>
</xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="prestazioneEnergeticaGlobale">
        <xs:complexType>
            <xs:sequence>
                <xs:element name="edificioEnergiaQuasiZero" type="xs:boolean"/>
                <xs:element name="classificazione" type="typeClasseEnergetica"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="riferimenti">
        <xs:annotation>
            <xs:documentation>Classificazione di immobili simili</xs:documentation>
        </xs:annotation>
        <xs:complexType>
            <xs:sequence>
                <xs:element name="classificazioneNuovi" type="typeClasseEnergetica">
                    <xs:annotation>
                        <xs:documentation>Si tratta dello stesso fabbricato calcolato con i requisiti minimi</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="classificazioneEsistenti" type="typeClasseEnergetica" minOccurs="0"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
        </xs:sequence>
    </xs:complexType>
<xs:simpleType name="typeCodiceISTAT">
    <xs:annotation>
        <xs:documentation>Codice ISTAT del comune</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:length value="6"/>
        <xs:pattern value="[0-9][0-9][0-9][0-9][0-9][0-9]"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="typeAnno">
```

```xml
          - <xs:restriction base="xs:unsignedInt">
                <xs:minInclusive value="1000"/>
                <xs:maxInclusive value="2100"/>
          </xs:restriction>
     </xs:simpleType>
- <xs:simpleType name="typeSuperficieVolume">
     - <xs:restriction base="xs:decimal">
                <xs:fractionDigits value="2"/>
          </xs:restriction>
     </xs:simpleType>
- <xs:simpleType name="typeSubalterno">
     - <xs:restriction base="xs:string">
                <xs:minLength value="0"/>
                <xs:maxLength value="5"/>
          </xs:restriction>
     </xs:simpleType>
- <xs:complexType name="typeDatiGenerali">
     - <xs:sequence>
          - <xs:element name="destinazioneUso">
               - <xs:annotation>
                      <xs:documentation>0=Residenziale 1=Non
                           residenziale</xs:documentation>
                 </xs:annotation>
               - <xs:simpleType>
                    - <xs:restriction base="xs:unsignedByte">
                           <xs:minInclusive value="0"/>
                           <xs:maxInclusive value="1"/>
                      </xs:restriction>
                 </xs:simpleType>
            </xs:element>
          - <xs:element name="classificazioneDPR412">
               - <xs:annotation>
                      <xs:documentation>0=E1(1) abitazioni adibite a residenza con carattere
                           continuativo 1=E1(1)bis collegi, luoghi di ricovero, case di pena,
                           caserme, conventi 2=E1(2) abitazioni adibite a residenza con
                           occupazione saltuaria 3=E1(3) edifici adibiti ad albergo, pensione ed
                           attività similari 4=E2 uffici e assimilabili 5=E3 ospedali, cliniche, case
                           di cura e assimilabili 6=E4(1) cinema e teatri, sale di riunione per
                           congressi e assimilabili 7=E4(2) mostre, musei e biblioteche, luoghi di
                           culto e assimilabili 8=E4(3) bar, ristoranti, sale da ballo e assimilabili
                           9=E5 attività commerciali e assimilabili 10=E6(1) piscine, saune e
                           assimilabili 11=E6(2) palestre e assimilabili 12=E6(3) servizi di
                           supporto alle attività sportive 13=E7 attività scolastiche 14=E8 attività
                           industriali, artigianali e assimilabili</xs:documentation>
                 </xs:annotation>
               - <xs:simpleType>
                    - <xs:restriction base="xs:unsignedByte">
                           <xs:minInclusive value="0"/>
                           <xs:maxInclusive value="14"/>
                      </xs:restriction>
                 </xs:simpleType>
            </xs:element>
          - <xs:element name="oggettoAttestato">
```

```xml
        - <xs:annotation>
              <xs:documentation>0=Intero edificio 1=Unità immobiliare 2=Gruppo di
                  unità immobiliari</xs:documentation>
          </xs:annotation>
        - <xs:simpleType>
            - <xs:restriction base="xs:unsignedByte">
                  <xs:minInclusive value="0"/>
                  <xs:maxInclusive value="2"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
  - <xs:element name="numeroUnitaImmobiliari">
        - <xs:simpleType>
            - <xs:restriction base="xs:unsignedInt">
                  <xs:minInclusive value="1"/>
                  <xs:maxInclusive value="999"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
  - <xs:element name="motivazione">
        - <xs:annotation>
              <xs:documentation>0=Nuova Costruzione 1=Passaggio di proprietà
                  2=Locazione 3=Ristrutturazione importante 4=Riqualificazione
                  Energetica 5=Altro</xs:documentation>
          </xs:annotation>
        - <xs:simpleType>
            - <xs:restriction base="xs:unsignedByte">
                  <xs:minInclusive value="0"/>
                  <xs:maxInclusive value="5"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
  - <xs:element name="altraMotivazione" type="xs:boolean">
        - <xs:annotation>
              <xs:documentation>Oltre alla "motivazione" indicata, è tuttavia possibile
                  inserire un'ulteriore motivazione alla voce "Altro"</xs:documentation>
          </xs:annotation>
      </xs:element>
  - <xs:element name="descrizioneAltraMotivazione" minOccurs="0">
        - <xs:annotation>
              <xs:documentation>Descrizione dell'eventuale "Altra" motivazione
                  (valorizzata solo se è presente "altraMotivazione")
                  </xs:documentation>
          </xs:annotation>
        - <xs:simpleType>
            - <xs:restriction base="xs:string">
                  <xs:minLength value="0"/>
                  <xs:maxLength value="200"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
  - <xs:element name="datiIdentificativi">
        - <xs:complexType>
```

```xml
- <xs:sequence>
    - <xs:element name="fotoEdificio" minOccurs="0">
        - <xs:complexType>
            - <xs:sequence>
                - <xs:element name="immagine">
                    - <xs:annotation>
                        <xs:documentation>DIMENSIONE max
                            512x512 oppure
                            600x400</xs:documentation>
                      </xs:annotation>
                    - <xs:simpleType>
                        - <xs:restriction base="xs:base64Binary">
                            <xs:maxLength value="256000"/>
                          </xs:restriction>
                      </xs:simpleType>
                  </xs:element>
                - <xs:element name="formatoImmagine"
                    type="xs:string" fixed="JPG">
                    - <xs:annotation>
                        <xs:documentation>solo immagine
                            JPG</xs:documentation>
                      </xs:annotation>
                  </xs:element>
              </xs:sequence>
          </xs:complexType>
      </xs:element>
    - <xs:element name="codiceISTAT" type="typeCodiceISTAT">
        - <xs:annotation>
            <xs:documentation>codice ISTAT del
                comune</xs:documentation>
          </xs:annotation>
      </xs:element>
    - <xs:element name="indirizzo">
        - <xs:simpleType>
            - <xs:restriction base="xs:string">
                <xs:maxLength value="255"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
    - <xs:element name="piano">
        - <xs:simpleType>
            - <xs:restriction base="xs:string">
                <xs:maxLength value="255"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
    - <xs:element name="interno">
        - <xs:simpleType>
            - <xs:restriction base="xs:string">
                <xs:maxLength value="255"/>
              </xs:restriction>
          </xs:simpleType>
      </xs:element>
```

```xml
- <xs:element name="LatitudineGIS" type="xs:decimal">
    - <xs:annotation>
        <xs:documentation>Coodinata GIS (WGS84): Latitudine
            (NORD) in decimali</xs:documentation>
      </xs:annotation>
  </xs:element>
- <xs:element name="LongitudineGIS" type="xs:decimal">
    - <xs:annotation>
        <xs:documentation>Coodinata GIS (WGS84): Longitudine
            (EST) in decimali</xs:documentation>
      </xs:annotation>
  </xs:element>
- <xs:element name="zonaClimatica">
    - <xs:annotation>
        <xs:documentation>A, B, C, D, E, F</xs:documentation>
      </xs:annotation>
    - <xs:simpleType>
        - <xs:restriction base="xs:string">
            <xs:minLength value="1"/>
            <xs:maxLength value="1"/>
            <xs:pattern value="[A-F]"/>
          </xs:restriction>
      </xs:simpleType>
  </xs:element>
  <xs:element name="annoCostruzione" type="typeAnno"/>
  <xs:element name="superficieUtileRiscaldata"
      type="typeSuperficieVolume"/>
  <xs:element name="superficieUtileRaffrescata"
      type="typeSuperficieVolume"/>
  <xs:element name="volumeLordoRiscaldato"
      type="typeSuperficieVolume"/>
  <xs:element name="volumeLordoRaffrescato"
      type="typeSuperficieVolume"/>
- <xs:element name="catasto">
    - <xs:complexType>
        - <xs:sequence>
            - <xs:element name="datiCatastali"
              type="typeDatiCatastali" maxOccurs="unbounded">
                - <xs:annotation>
                    <xs:documentation>E' possibile inserire più
                        di un blocco di dati catastali per poter
                        gestire qualsiasi situazione, anche il caso
                        di edifici su più Comuni, etc. N.B. Deve
                        essere gestita la STAMPA sull'
                        APE.</xs:documentation>
                  </xs:annotation>
              </xs:element>
          </xs:sequence>
      </xs:complexType>
  </xs:element>
  </xs:sequence>
  </xs:complexType>
</xs:element>
```

```xml
- <xs:element name="serviziEnergeticiPresenti">
    - <xs:complexType>
        - <xs:sequence>
            - <xs:element name="climatizzazioneInvernale" type="xs:boolean" default="1">
                - <xs:annotation>
                    <xs:documentation>Nel caso di edificio residenziale il servizio di climatizzazione invernale deve essere sempre attivo</xs:documentation>
                  </xs:annotation>
              </xs:element>
              <xs:element name="climatizzazioneEstiva" type="xs:boolean"/>
              <xs:element name="ventilazioneMeccanica" type="xs:boolean"/>
            - <xs:element name="produzioneAcquaCaldaSanitaria" type="xs:boolean">
                - <xs:annotation>
                    <xs:documentation>Nel caso di edificio residenziale il servizio di acqua calda sanitaria deve essere sempre attivo</xs:documentation>
                  </xs:annotation>
              </xs:element>
              <xs:element name="illuminazione" type="xs:boolean"/>
              <xs:element name="trasportoPersoneCose" type="xs:boolean"/>
          </xs:sequence>
      </xs:complexType>
  </xs:element>
  </xs:sequence>
  </xs:complexType>
- <xs:complexType name="typePrestazioneImpianti">
    - <xs:sequence>
        <xs:element name="energiaElettricaRete" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="gasNaturale" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="gpl" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="carbone" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="gasolio" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="olioCombustibile" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="biomasseSolide" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="biomasseLiquide" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="biomasseGassose" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="solareFotovoltaico" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="solareTermico" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="eolico" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="teleriscaldamento" type="typeConsumoImpianto" minOccurs="0"/>
        <xs:element name="teleraffrescamento" type="typeConsumoImpianto" minOccurs="0"/>
```

```xml
<xs:element name="altro" type="typeConsumoImpiantoAltro" minOccurs="0"/>
    - <xs:element name="epglnren" type="typeIndicePrestazione">
        - <xs:annotation>
            <xs:documentation>Indica della prestazione energetica non
                rinnovabile</xs:documentation>
        </xs:annotation>
    </xs:element>
    - <xs:element name="epglren" type="typeIndicePrestazione">
        - <xs:annotation>
            <xs:documentation>Indica della prestazione energetica
                rinnovabile</xs:documentation>
        </xs:annotation>
    </xs:element>
    <xs:element name="emissioniCO2" type="typeIndicePrestazione"/>
    </xs:sequence>
  </xs:complexType>
- <xs:complexType name="typeRaccomandazioni">
    - <xs:annotation>
        <xs:documentation>RIQUALIFICAZIONE ENERGETICA E
            RISTRUTTURAZIONE IMPORTANTE</xs:documentation>
    </xs:annotation>
    - <xs:sequence>
        <xs:element name="interventoRaccomandato"
            type="typeInterventoRaccomandato" maxOccurs="6"/>
        <xs:element name="classificazione" type="typeClasseEnergetica"/>
    </xs:sequence>
  </xs:complexType>
- <xs:complexType name="typeDatiEnergetici">
    - <xs:sequence>
        <xs:element name="energiaEsportata" type="typeConsumoAnnuo" default="0"/>
        - <xs:element name="vettoreEnergetico" default="0">
            - <xs:annotation>
                <xs:documentation>0=Energia elettrica 1=Energia termica 2=Altro
                    </xs:documentation>
            </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:unsignedByte">
                    <xs:minInclusive value="0"/>
                    <xs:maxInclusive value="2"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:sequence>
  </xs:complexType>
- <xs:complexType name="typeDatiImpianti">
    - <xs:sequence>
        - <xs:element name="climatizzazioneInvernale">
            - <xs:complexType>
                - <xs:sequence>
                    - <xs:choice>
                        - <xs:element name="impianto" type="typeImpianto"
                            maxOccurs="unbounded">
                            - <xs:annotation>
```

```xml
                    <xs:documentation>alternativo ad
                        "impiantoSimulato" (solo uno dei due)
                    </xs:documentation>
                </xs:annotation>
            </xs:element>
-           <xs:element name="impiantoSimulato" type="xs:string"
                fixed="SIMULATO IN QUANTO ASSENTE">
-               <xs:annotation>
                    <xs:documentation>alternativo ad "impianto" (solo uno
                        dei due)</xs:documentation>
                </xs:annotation>
            </xs:element>
        </xs:choice>
        <xs:element name="efficienza" type="typeEfficienza"/>
        <xs:element name="prestazione" type="typePrestazione"/>
    </xs:sequence>
    </xs:complexType>
</xs:element>
-   <xs:element name="climatizzazioneEstiva" minOccurs="0">
-   <xs:complexType>
-       <xs:sequence>
            <xs:element name="impianto" type="typeImpianto"
                maxOccurs="unbounded"/>
            <xs:element name="efficienza" type="typeEfficienza"/>
            <xs:element name="prestazione" type="typePrestazione"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
-   <xs:element name="produzioneACS" minOccurs="0">
-   <xs:complexType>
-       <xs:sequence>
-           <xs:choice>
                <xs:element name="impianto" type="typeImpianto"
                    maxOccurs="unbounded"/>
-               <xs:element name="impiantoSimulato" type="xs:string"
                    fixed="SIMULATO IN QUANTO ASSENTE">
-                   <xs:annotation>
                        <xs:documentation>alternativo ad "impianto" (solo uno
                            dei due)</xs:documentation>
                    </xs:annotation>
                </xs:element>
            </xs:choice>
            <xs:element name="efficienza" type="typeEfficienza"/>
            <xs:element name="prestazione" type="typePrestazione"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
-   <xs:element name="impiantiCombinati" minOccurs="0">
-   <xs:complexType>
-       <xs:sequence>
            <xs:element name="impianto" type="typeImpianto"
                maxOccurs="unbounded"/>
```

```xml
                    <xs:element name="efficienza" type="typeEfficienza"
                            minOccurs="0"/>
                    <xs:element name="prestazione" type="typePrestazione"
                            minOccurs="0"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    -   <xs:element name="produzioneFontiRinnovabili" minOccurs="0">
        -   <xs:complexType>
            -   <xs:sequence>
                    <xs:element name="impianto" type="typeImpianto"
                            maxOccurs="unbounded"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    -   <xs:element name="ventilazioneMeccanica" minOccurs="0">
        -   <xs:complexType>
            -   <xs:sequence>
                    <xs:element name="impianto" type="typeImpianto"
                            maxOccurs="unbounded"/>
                    <xs:element name="efficienza" type="typeEfficienza"
                            minOccurs="0"/>
                    <xs:element name="prestazione" type="typePrestazione"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    -   <xs:element name="illuminazione" minOccurs="0">
        -   <xs:complexType>
            -   <xs:sequence>
                    <xs:element name="impianto" type="typeImpianto"
                            maxOccurs="unbounded"/>
                    <xs:element name="efficienza" type="typeEfficienza"
                            minOccurs="0"/>
                    <xs:element name="prestazione" type="typePrestazione"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
    -   <xs:element name="trasportoPersoneCose" minOccurs="0">
        -   <xs:complexType>
            -   <xs:sequence>
                    <xs:element name="impianto" type="typeImpianto"
                            maxOccurs="unbounded"/>
                    <xs:element name="efficienza" type="typeEfficienza"
                            minOccurs="0"/>
                    <xs:element name="prestazione" type="typePrestazione"/>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
        </xs:sequence>
    </xs:complexType>
-   <xs:simpleType name="typeRapporto">
    -   <xs:restriction base="xs:decimal">
            <xs:fractionDigits value="4"/>
```

```xml
            <xs:minInclusive value="0"/>
        </xs:restriction>
    </xs:simpleType>
-   <xs:simpleType name="typeTrasmittanza">
    -   <xs:restriction base="xs:decimal">
            <xs:fractionDigits value="4"/>
            <xs:minInclusive value="0"/>
        </xs:restriction>
    </xs:simpleType>
-   <xs:complexType name="typeDatiFabbricato">
    -   <xs:sequence>
            <xs:element name="volumeRiscaldato" type="typeSuperficieVolume"/>
            <xs:element name="superficieDisperdente" type="typeSuperficieVolume"/>
            <xs:element name="rapportoSV" type="typeRapporto"/>
            <xs:element name="ephnd" type="typeIndicePrestazione"/>
            <xs:element name="rapportoAsolAsupUtile" type="typeRapporto"/>
        -   <xs:element name="yie" type="typeTrasmittanza">
            -   <xs:annotation>
                    <xs:documentation>Media pesata in base alle superfici esterne escluse
                        quelle esposte fra N-NW e N-NE</xs:documentation>
                </xs:annotation>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
-   <xs:complexType name="typeImpianto">
    -   <xs:sequence>
        -   <xs:element name="tipoImpianto">
            -   <xs:annotation>
                    <xs:documentation>0=Caldaia standard 1=Caldaia a condensazione
                        2=Stufa o caminetto 3=Riscaldamento elettrico 4=HP elettrica aria-aria
                        5=HP elettrica aria-acqua 6=HP elettrica acqua-aria 7=HP elettrica
                        acqua-acqua 8=HP ad assorbimento aria-aria 9=HP ad assorbimento
                        aria-acqua 10=HP ad assorbimento acqua-aria 11=HP ad assorbimento
                        acqua-acqua 12=HP a motore endotermico aria-aria 13=HP a motore
                        endotermico aria-acqua 14=HP a motore endotermico acqua-aria
                        15=HP a motore endotermico acqua-acqua 16=Impianto solare termico
                        17=Impianto fotovoltaico 18=Cogeneratore 19=Teleriscaldamento
                        20=Eolico 21=Ventilatori 22=Lampade ad incandescenza
                        23=Lampade fluorescenti 24=Lampade a led 25=Lampade a scarica
                        26=Ascensore a motore elettrico a fune con contrappeso 27=Ascensore
                        a motore elettrico a fune con argano agganciato 28=Ascensore
                        idraulico 29=Scala mobile 30=Marciapiede mobile 31=Altro
                        32=Scalda-acqua autonomo istantaneo a gas 33=Scalda-acqua
                        autonomo ad accumulo a gas 34=Scalda-acqua autonomo a pompa di
                        calore 35=Scaldacqua a pompa di calore 36=Boiler elettrico
                        </xs:documentation>
                </xs:annotation>
            -   <xs:simpleType>
                -   <xs:restriction base="xs:unsignedByte">
                        <xs:minInclusive value="0"/>
                        <xs:maxInclusive value="36"/>
                    </xs:restriction>
                </xs:simpleType>
```

```xml
        </xs:element>
        <xs:element name="descrizioneImpianto" type="xs:string" minOccurs="0"/>
        <xs:element name="annoInstallazione" type="typeAnno"/>
        <xs:element name="codiceCatastoRegionaleImpiantiTermici">
            <xs:simpleType>
                <xs:restriction base="xs:string">
                    <xs:maxLength value="255"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
        <xs:element name="vettoriEnergeticiUtilizzati">
            <xs:complexType>
                <xs:sequence>
                    <xs:element name="vettore" default="0" maxOccurs="unbounded">
                        <xs:annotation>
                            <xs:documentation>0=Energia elettrica 1=Gas naturale
                                2=GPL 3=Carbone 4=Gasolio e Olio combustibile -
                                Opzione non utilizzabile dopo il 31/12/2016
                                5=Biomasse solide 6=Biomasse liquide 7=Biomasse
                                gassose 8=Solare fotovoltaico 9=Solare termico
                                10=Eolico 11=Teleriscaldamento
                                12=Teleraffrescamento 13=altro 14=Gasolio 15=Olio
                                combustibile </xs:documentation>
                        </xs:annotation>
                        <xs:simpleType>
                            <xs:restriction base="xs:unsignedByte">
                                <xs:minInclusive value="0"/>
                                <xs:maxInclusive value="15"/>
                            </xs:restriction>
                        </xs:simpleType>
                    </xs:element>
                </xs:sequence>
            </xs:complexType>
        </xs:element>
        <xs:element name="potenzaNominale">
            <xs:annotation>
                <xs:documentation>Potenza Nominale Utile</xs:documentation>
            </xs:annotation>
            <xs:simpleType>
                <xs:restriction base="xs:decimal">
                    <xs:minInclusive value="0"/>
                    <xs:fractionDigits value="2"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
<xs:simpleType name="typeEfficienza">
    <xs:restriction base="xs:decimal">
        <xs:minInclusive value="0"/>
        <xs:fractionDigits value="2"/>
    </xs:restriction>
</xs:simpleType>
```

```xml
- <xs:complexType name="typePrestazione">
    - <xs:sequence>
          <xs:element name="epren" type="typeIndicePrestazione"/>
          <xs:element name="epnren" type="typeIndicePrestazione"/>
      </xs:sequence>
  </xs:complexType>
- <xs:complexType name="typeSoggettoCertificatore">
    - <xs:sequence>
        - <xs:element name="tipoSoggettoCertificatore">
            - <xs:annotation>
                  <xs:documentation>0=Ente/organismo pubblico 1=Tecnico abilitato
                      2=Organismo/società</xs:documentation>
              </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:unsignedByte">
                      <xs:minInclusive value="0"/>
                      <xs:maxInclusive value="2"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
        - <xs:element name="nome">
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                      <xs:maxLength value="255"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
        - <xs:element name="cognome">
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                      <xs:maxLength value="255"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
        - <xs:element name="denominazione" minOccurs="0">
            - <xs:annotation>
                  <xs:documentation>Da compilare se "tipoSoggettoCertificatore" è diverso
                      da 1 (Tecnico abilitato)</xs:documentation>
              </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                      <xs:maxLength value="255"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
        - <xs:element name="indirizzo">
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                      <xs:maxLength value="255"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
        - <xs:element name="email">
```

```xml
                        - <xs:simpleType>
                            - <xs:restriction base="xs:string">
                                  <xs:maxLength value="255"/>
                              </xs:restriction>
                          </xs:simpleType>
                    </xs:element>
                - <xs:element name="telefono">
                    - <xs:simpleType>
                        - <xs:restriction base="xs:string">
                              <xs:maxLength value="255"/>
                          </xs:restriction>
                      </xs:simpleType>
                  </xs:element>
            - <xs:element name="titolo">
                - <xs:annotation>
                      <xs:documentation>Titolo abilitante (iscrizione ordini/collegi; corso
                          autorizzato da MiSE; corso autorizzato dalla Regione, ecc.)
                          </xs:documentation>
                  </xs:annotation>
                - <xs:simpleType>
                    - <xs:restriction base="xs:string">
                          <xs:maxLength value="255"/>
                      </xs:restriction>
                  </xs:simpleType>
              </xs:element>
        - <xs:element name="ordineIscrizione" minOccurs="0">
            - <xs:annotation>
                  <xs:documentation>Il campo deve contenere: Ordine, provincia e numero
                      di iscrizione separati dal carattere [;] (punto e virgola)
                      </xs:documentation>
              </xs:annotation>
            - <xs:simpleType>
                - <xs:restriction base="xs:string">
                      <xs:maxLength value="255"/>
                  </xs:restriction>
              </xs:simpleType>
          </xs:element>
      - <xs:element name="dichiarazioneIndipendenza" default="0">
          - <xs:annotation>
                <xs:documentation>0=Il sottoscritto certificatore, consapevole delle
                    responsabilità assunte ai sensi degli artt.359 e 481 del Codice Penale,
                    DICHIARA di aver svolto con indipendenza ed imparzialità di
                    giudizio l'attività di Soggetto Certificatore del sistema edificio
                    impianto oggetto del presente attestato e l'assenza di conflitto di
                    interessi ai sensi dell'art.3 del D.P.R. 16 aprile 2013, n. 75.
                    1=Dichiarazione di indipendenza specifica della
                    Regione</xs:documentation>
            </xs:annotation>
          - <xs:simpleType>
              - <xs:restriction base="xs:unsignedByte">
                    <xs:minInclusive value="0"/>
                    <xs:maxInclusive value="1"/>
                </xs:restriction>
```

```xml
                </xs:simpleType>
            </xs:element>
-       <xs:element name="informazioniAggiuntive" minOccurs="0">
-           <xs:simpleType>
-               <xs:restriction base="xs:string">
                    <xs:minLength value="0"/>
                    <xs:maxLength value="255"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:sequence>
</xs:complexType>
-   <xs:complexType name="typeSoftwareUtilizzato">
-       <xs:sequence>
-           <xs:element name="requisitiRispondenzaRisultati" type="xs:boolean"
            default="1">
-               <xs:annotation>
                    <xs:documentation>Il software utilizzato risponde ai requisiti di
                        rispondenza e garanzia di scostamento massimo dei risultati conseguiti
                        rispetto ai valori ottenuti per mezzo dello strumento di riferimento
                        nazionale ?</xs:documentation>
                </xs:annotation>
            </xs:element>
-           <xs:element name="calcoloSemplificato" type="xs:boolean" default="0">
-               <xs:annotation>
                    <xs:documentation>Ai fini della redazione del presente attestato è stato
                        utilizzato un software che impieghi un metodo di calcolo
                        semplificato ?</xs:documentation>
                </xs:annotation>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
-   <xs:complexType name="typeDatiExtra">
-       <xs:annotation>
            <xs:documentation>DATI aggiuntivi</xs:documentation>
        </xs:annotation>
-       <xs:sequence>
-           <xs:element name="comune">
-               <xs:annotation>
                    <xs:documentation>Denominazione del COMUNE</xs:documentation>
                </xs:annotation>
-               <xs:simpleType>
-                   <xs:restriction base="xs:string">
                        <xs:maxLength value="255"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
-           <xs:element name="CAP">
-               <xs:simpleType>
-                   <xs:restriction base="xs:string">
                        <xs:length value="5"/>
                        <xs:pattern value="[0-9][0-9][0-9][0-9][0-9]"/>
                    </xs:restriction>
```

```xml
        </xs:simpleType>
      </xs:element>
-   <xs:element name="provincia">
  -   <xs:annotation>
            <xs:documentation>Denominazione della
                PROVINCIA</xs:documentation>
      </xs:annotation>
  -   <xs:simpleType>
      -   <xs:restriction base="xs:string">
              <xs:maxLength value="255"/>
          </xs:restriction>
      </xs:simpleType>
  </xs:element>
-   <xs:element name="regione">
  -   <xs:annotation>
          <xs:documentation>Denominazione della REGIONE</xs:documentation>
      </xs:annotation>
  -   <xs:simpleType>
      -   <xs:restriction base="xs:string">
              <xs:maxLength value="255"/>
          </xs:restriction>
      </xs:simpleType>
  </xs:element>
-   <xs:element name="gradiGiorno" default="1">
  -   <xs:simpleType>
      -   <xs:restriction base="xs:unsignedInt">
              <xs:minExclusive value="0"/>
          </xs:restriction>
      </xs:simpleType>
  </xs:element>
-   <xs:element name="dataSopralluogo" type="xs:date">
  -   <xs:annotation>
          <xs:documentation>DATA del sopralluogo</xs:documentation>
      </xs:annotation>
  </xs:element>
-   <xs:element name="softwareUtilizzato">
  -   <xs:annotation>
          <xs:documentation>DENOMINAZIONE del software
              utilizzato</xs:documentation>
      </xs:annotation>
  -   <xs:simpleType>
      -   <xs:restriction base="xs:string">
              <xs:maxLength value="255"/>
          </xs:restriction>
      </xs:simpleType>
  </xs:element>
-   <xs:element name="numeroCertificatoSoftware">
  -   <xs:annotation>
          <xs:documentation>Numero del CERTIFICATO (CTI) del software
              utilizzato</xs:documentation>
      </xs:annotation>
  -   <xs:simpleType>
      -   <xs:restriction base="xs:unsignedInt">
```

```xml
                        <xs:minInclusive value="1"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
-           <xs:element name="ephndLim" type="xs:decimal">
-               <xs:annotation>
                    <xs:documentation>Limite dell'indice di prestazione termica utile per
                        riscaldamento (calcolata con l'edificio di riferimento)
                        </xs:documentation>
                </xs:annotation>
            </xs:element>
-           <xs:element name="EPglnrenRifStandard" type="xs:decimal">
-               <xs:annotation>
                    <xs:documentation>Indice di prestazione energetica GLOBALE
                        dell'edificio di riferimento per la costruzione della scala delle classi
                        energetiche. DM 26/06/2015 LINEE GUIDA - Punto
                        5.1</xs:documentation>
                </xs:annotation>
            </xs:element>
-           <xs:element name="idCatastale" minOccurs="0">
-               <xs:annotation>
                    <xs:documentation>Ulteriore, eventuale, identificativo catastale per
                        subalterni di edifici pubblici, etc.</xs:documentation>
                </xs:annotation>
-               <xs:simpleType>
-                   <xs:restriction base="xs:string">
                        <xs:maxLength value="255"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
-           <xs:element name="proprietaEdificio">
-               <xs:annotation>
                    <xs:documentation>0=Privato 1=Pubblico 2=Uso
                        Pubblico</xs:documentation>
                </xs:annotation>
-               <xs:simpleType>
-                   <xs:restriction base="xs:unsignedByte">
                        <xs:minInclusive value="0"/>
                        <xs:maxInclusive value="2"/>
                    </xs:restriction>
                </xs:simpleType>
            </xs:element>
-           <xs:element name="codiceEdificioScolastico" minOccurs="0">
-               <xs:annotation>
                    <xs:documentation>Se l'elemento classificazioneDPR412 è pari a 13
                        (E7=Attività scolastica) occorre indicare il Codice Edificio costituito
                        da 10 caratteri numerici.</xs:documentation>
                </xs:annotation>
-               <xs:simpleType>
-                   <xs:restriction base="xs:string">
                        <xs:maxLength value="10"/>
                    </xs:restriction>
                </xs:simpleType>
```

```xml
        </xs:element>
    -   <xs:element name="tipologiaEdilizia">
        -   <xs:annotation>
                <xs:documentation>0=Edificio isolato (monofamiliare) 1=Edificio isolato
                    (bifamiliare) 2=Edificio isolato (plurifamiliare) 3=Edificio in Linea
                    4=Edificio a Schiera 5=Edificio a Corte 6=Edificio a Torre 7=Edificio
                    a Blocco 8=Edificio a Piastra 9=Altro</xs:documentation>
            </xs:annotation>
        -   <xs:simpleType>
            -   <xs:restriction base="xs:unsignedByte">
                    <xs:minInclusive value="0"/>
                    <xs:maxInclusive value="9"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    -   <xs:element name="tipologiaCostruttiva">
        -   <xs:annotation>
                <xs:documentation>0=Struttura in muratura portante 1=Struttura in c.a.
                    (con chiusure in laterizi) 2=Struttura in c.a. (con chiusure continue in
                    vetro) 3=Struttura in c.a. (con chiusure in pannelli prefabbricati)
                    4=Struttura in acciaio (con chiusure in muratura) 5=Struttura in acciaio
                    (con facciate continue in vetro) 6=Struttura in acciaio (con chiusure in
                    pannelli prefabbricati) 7=Struttura in legno 8=Struttura prefabbricata
                    in c.a. 9=Struttura mista (c.a. e laterizi) 10=Struttura mista (c.a. e
                    acciaio) 11=Struttura mista (acciaio e muratura) 12=Struttura mista
                    (muratura e legno) 13=Struttura mista (altro)
                    14=Altro</xs:documentation>
            </xs:annotation>
        -   <xs:simpleType>
            -   <xs:restriction base="xs:unsignedByte">
                    <xs:minInclusive value="0"/>
                    <xs:maxInclusive value="14"/>
                </xs:restriction>
            </xs:simpleType>
        </xs:element>
    </xs:sequence>
    </xs:complexType>
</xs:schema>
```