

## Resources of Biomass used for Energy in Forests of the Czech Republic

### 1. Tendencies of forest development in the Czech Republic

- area covered with forest is increasing
- timber stock is increasing
- proportion of over mature stands (age classes 6 and 7+) is increasing
- harvesting intensity (and the total volume of harvested timber) is increasing
- since 1999, the average rotation age has been decreasing

2. In the Czech Republic, the harvesting intensity in forests has been growing steadily from 3.32 m<sup>3</sup>/ha in 1961 to 6.67 m<sup>3</sup>/ha (in 2006).

3. In the Czech Republic, the balanced prospect of the annual calculated cut in production forests (i.e. without protection forest and fist zones of National Parks and Protected Landscape Areas) amounts to 14.57 mil. m<sup>3</sup> of timber u.b. for the period from 2006 to 2036.

### 4. Potential of available harvest residues in forests

- harvest residues of thinning ..... 215 thousand m<sup>3</sup>,
- harvest residues of principal harvest ... 1,025 thousand m<sup>3</sup>,

Total of harvest residues ..... 1,240 thousand m<sup>3</sup>.

Harvest residues (branches, tips of trees) comprise approx. 10 % of the harvested timber and they can be used up to 80 % due to technical and economic reasons.

### 5. Wood waste of timber processing

The wood waste of timber processing (i.e. resources outside of the forest) includes mainly sawdust and wood chips originating as a by-product when producing sawn wood and it amounts to 25 % of the total inland break down of round wood assortments.

Wood waste amounts up to approx. 1,600 thousand m<sup>3</sup>; it is then finally used to make energy (burning of chips, sawdust, pellets, patent fuel, etc.) or agglomerated boards (especially the high quality white sorted chips).

### 6. The total potential of wood biomass for energy – average per 1 year

- **Fuel wood (assortments originating when harvesting timber in forests).....1,260 thousand m<sup>3</sup>,**
  - **Residues of principal and advance felling of trees (usable).....1,240 thousand m<sup>3</sup>,**
  - **Wood waste of timber processed outside of forests....max ..... 1,600 thousand m<sup>3</sup>.**
- The total potential of wood biomass for energy .....4,100 thousand m<sup>3</sup>;**

Based on the document of Forest Management Institute Brandýs n. Labem – Preparing Documents for New Concept and Strategy of Forest Management in the Czech Republic – Ref. No.:41258/2007-16220.

March 2008