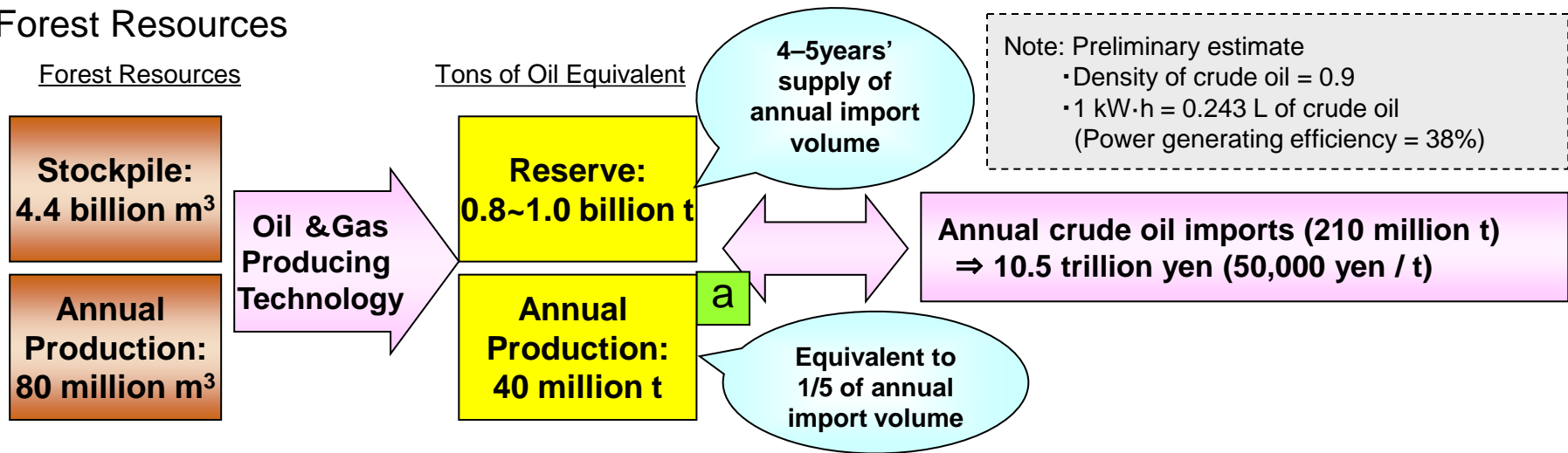


# Forest Resources and Waste Biomass in Japan: Oil Equivalent

## 1. Forest Resources



## 2. Waste Biomass: Annual Generation (2010)

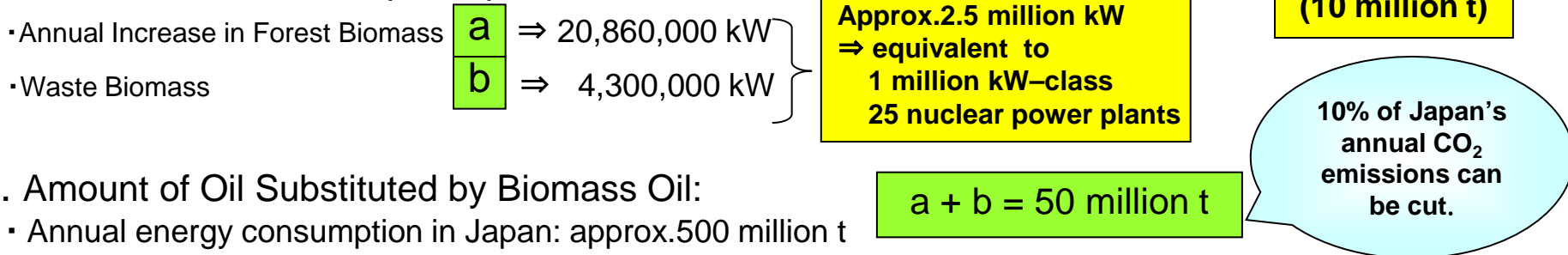
Target Biomass	Annual Generation	Methane Fermentation Gas Production Crude oil equivalent at 30-50% fermentation efficiency
• Sewage sludge	approx. 78 million t	655,000 kL
• Food waste	approx. 19 million t	1,482,000 kL
• Livestock waste	approx. 88 million t	1,584,000 kL
• Household raw garbage	approx. 11 million t	860,000 kL
		<b>Total 4,580,000 kL / year</b>

**Nanonized Grinder Technology**

**Fermentation Efficiency: 80-90%**

**9,160,000 kL (10 million t)**

## 3. Power Generation Output Equivalent



## 4. Amount of Oil Substituted by Biomass Oil:

- Annual energy consumption in Japan: approx. 500 million t