



# PROJECT DESIGN

## ITTO Project PD 737/14 Rev. 2 (I)

Developing Supply Capacity of Wood-Based Biomass Energy through Improved Enabling Conditions and Efficient Utilization of Degraded Forest Lands involving Local Communities in North Sumatra Province of Indonesia

Executing Agency: Directorate of Production Forest Business Management (UHP) of DG PHPL

Collaborating Agency: Indonesian Sawmill & Woodworking Association (ISWA)

# Project Design

## **a. Development Objective**

To increase contribution of the forest sector to renewable energy supply and regional economic development through increased supply of wood-based biomass energy

## **b. Specific Objective**

To improve enabling conditions for building up capacity to supply wood-based biomass energy in North Sumatera region

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## **c. Outputs**

**Output 1: Development of sustainable supply of energy wood initiated**

**Output 2: Skillful manpower for development of wood-based biomass energy available**

**Output 3: Investment in wood-based energy industry development promoted**

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## d. Activities

### Output 1

Development of sustainable supply of energy wood initiated

**Activity 1.1:** To identify available suitable lands for development of energy forests in North Sumatra province

**Activity 1.2:** To identify suitable and available lands for energy forest development in 3 FMUs

**Activity 1.3:** To establish energy forest models for purpose of demonstration and training

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**Activity 1.4:** To provide estimates of sustainable supply potential of wood from energy forests established on degraded forest lands

**Activity 1.5:** To assess long-term supply potential of energy wood from non-forest sources

## **Output 2**

**Skillful manpower for development of wood-based biomass energy available**

**Activity 2.1** To conduct dialogue with local communities on benefits of energy forest development

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**Activity 2.2: To train local communities on technical skills for energy forest development**

**Activity 2.3: To train local communities on cooperative management to support energy wood business development**

**Activity 2.4: To conduct comparative studies on wood-based energy industry development**

**Activity 2.5: To develop technical manuals on energy forest development for 3 tree species planted**

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## Output 3

Investment in wood-based energy industry development promoted

**Activity 3.1:** To disseminate information on technology and market for wood-based energy through website and other means

**Activity 3.2:** To organize one national workshop on wood-based energy development in Pematang Siantar

**Activity 3.3:** To examine caloric properties of 3 energy wood species planted

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**Activity 3.4:** To conduct a feasibility study on investment in commercial manufacturing of wood- based energy (electricity or wood pellet)

**Activity 3.5:** To review existing policy on wood biomass-based energy development in view of promoting investment

**Activity 3.6:** To form and operate a consultation forum on renewable energy for enhancing communication and coordination between stakeholders

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