

What is a wood-saving stove?

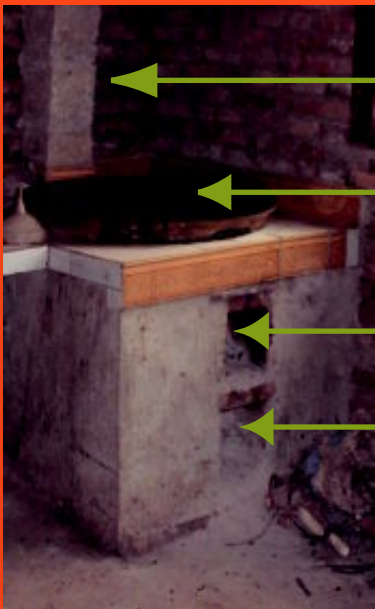
A wood-saving stove consists of a central metal core inside of a furnace. This equipment boosts energy efficiency and considerably reduces wood consumption.



The model is being promoted in China as an alternative to inefficient traditional fires. It generates big savings in wood use.

Efficiency and ease of use are improved via:

- ❑ **A good air supply and smoke removal through the chimney** producing optimum combustion and improved air quality for users.
- ❑ **Thick walls made from earthenware bricks** providing good heat insulation
- ❑ **Heat circulation** so that large amounts of food can be cooked efficiently



Chimney for smoke removal

Large dish closely fitting the stove to capture as much heat as possible

Opening to insert wood

Air inlet to improve combustion



"Every day I have to walk 6 kilometers from the house to collect wood. It takes me 5 hours a day! On each journey I gather the 30 kilograms of wood my family needs for one day".

ZHU Zhenghua, aged 30, family of 6

"I prefer not to use coal, because it costs too much. Sometimes we don't heat the place quite simply through lack of time and money".

RAO Shicai, aged 44, 3 children

3 good reasons to invest with ID

- ❑ **Local impact for populations and global benefits for the environment:** populations' living conditions are improving while fighting deforestation, pollution, global warming.
- ❑ **Targets' relevance:** disadvantaged populations, living in isolated areas, within a damaged environment.
- ❑ **Acknowledged experience and skills:** water and sanitation, renewable energies, carbon finance, training.

Initiative Développement

Initiative Développement (ID) is a French nongovernmental organization set up in 1994 and headquartered in Poitiers.

For over 15 years, ID has been partnering underprivileged populations in the countries of the South by encouraging the emergence and strengthening of local development actors.

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"Wood-saving stove" Projects ID China

Where improved living conditions
meet environmental protection

“Wood-saving stoves” projects

The “Wood-saving stove” projects aim to build **2000 stoves** in the Guizhou and Yunnan provinces by 2013.

The goal is to reduce the amount of wood used by the poorest families, eliminate some of the exhausting journeys the villagers have to make to cut wood, and slow down deforestation.

Guizhou Project
2010

1 000 stoves

Yunnan Project
2011

1 000 stoves
integrated with
the biogas project

Over 10 000
beneficiaries

Wood, a vital resource in the rural environment

Yunnan and Guizhou are subject to intensive **deforestation**, caused particularly by the increase in areas under cultivation, by industrialization, and by the high demand for firewood and building timber. The years from 1950 to 1980 saw the destruction of almost half the forests in Yunnan.

Every day the rural populations of Yunnan and Guizhou use large amounts of wood for both cooking and heating.



In winter, in certain areas of Guizhou, the villagers must make **between 4 and 7 return journeys a week** to forest plots located several kilometers from the village. More often than not it is the women who have to bring back **between 20 and 40 kilograms of wood each journey**.

Proven efficiency

Standard cookstoves

Very low thermal efficiency:
10 to 20%



Wood-saving stoves

Improved thermal efficiency:
over 35%



ID Project

How much does a wood-saving stove cost?

It costs approximately **€55** to build a wood-saving stove. ID supplies some of the materials, i.e. the cast iron core of the cookstove, the chimney, the bricks and the cement.

The labor is provided by the villagers, assisted by technicians in the ID team. The beneficiaries also have to provide the wok and the sand.

On average it takes **1 or 2 days' work** to build a wood-saving stove.

ID and GoodPlanet

The Good Planet Foundation finances “clean development” projects contributing to solidarity with the countries of the South. It is involved with ID through its participation in funding the “Wood saving stoves” project in Guizhou Province (1 000 cookstoves).

www.goodplanet.org

The economic and social benefits

- ❑ **Time saving:** wood-gathering chores are reduced thus freeing up several extra hours a day to spend on other activities
- ❑ **Reduction in toxic smoke** through more efficient combustion and installation of chimneys: indoor air quality is improved and respiratory and eye illnesses are reduced
- ❑ **Faster and more uniform cooking:** optimum combustion provides better heat distribution for cooking
- ❑ **Improved safety:** there is a lower risk of fire or burns

Environmental advantages

- ❑ **Fighting deforestation:** wood consumption is reduced by at least 50%
- ❑ **Fighting greenhouse gas emissions:** the drop in wood cutting for cooking leads to an average saving for each stove of 2 tonnes of CO₂ per year

Carbon finance and wood-saving stoves

The ID “Wood-saving stove” projects allows the beneficiaries to cut down on their wood and coal consumption and thus cut greenhouse gas emissions. The Emission Reductions (ERs) are sold on the voluntary carbon finance market.

ID's emission reductions are recorded in line with Gold Standard requirements. Gold Standard is an organization that certifies emission reductions traded on the voluntary market. This quality label was set up by NGOs and testifies to genuine added value in economic and social terms guaranteeing that the development is sustainable.

The income from emission reductions sales enables ID to provide long-term quality control of all its “Wood-saving stove” projects while investing in new environmental or community projects for the benefit of the most underprivileged populations.