



Recycle at Work

METALS

Iron and steel, which can be separated magnetically from the waste stream, are the world's most recycled materials and among the easiest materials to reprocess. Using recycled metal to manufacture new products saves considerable energy and reduces carbon dioxide emissions.

Did you know?

The energy saved by recycling one aluminum can is enough to run a television for three hours.

Steel

Manufacturing steel with recycled materials saves about 74 percent of the energy than using virgin mineral ore.

Aluminum

Manufacturing aluminum from recycled materials saves approximately 95 percent of the energy it would take to use virgin mineral ore. This is because the temperature necessary for melting recycled, nearly pure aluminum is 600 degrees Celsius, but extracting mined aluminum from its ore requires another 300 degrees, or 900 Celsius. Reaching the higher temperature requires more energy, hence the benefits of making aluminum with recycled materials instead.

Metal recycling protects the environment and saves energy.

Using secondary raw materials means less use of natural resources that otherwise would be needed to make new metal compounds, such as iron ore in steelmaking, nickel in stainless steel, or alumina and bauxite in aluminum smelting. By smelting aluminum scrap, 354,000 tons of carbon dioxide is saved per 100,000 tons of aluminum produced.

For more information

Visit www.RecycleAtWork.com or call Metro Recycling Information at 503-234-3000.

Sources

Oregon Department of Environmental Quality
www.reuters.com
www.recyclemetals.org

Fact sheets were created by Metro and your local governments to help reduce waste in the business sector. Printed on recycled paper. 09150



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