A close-up photograph of a person's hand resting on a solar panel. The hand is positioned in the lower right quadrant, with fingers slightly spread. The solar panel is dark blue with a grid of white lines. In the background, a bright sun is shining, creating a strong lens flare and illuminating the scene with a warm, golden light. The overall composition is clean and modern, emphasizing sustainability and innovation.

SUSTAINABILITY
AND
INNOVATION

CRANE
CURRENCY[®]

INTRODUCTION

Crane Currency has made paper for more than 240 years. Paul Revere, the American patriot, was among our first customers in 1775. Neither he nor Stephen Crane, who made the paper for him, contemplated the environmental implications of papermaking. To be honest, it would take several generations.

Nearly 70 years ago, Crane Currency took a look over the horizon and began making some innovative changes to achieve a well-managed balance between stewardship of the business and stewardship of the environment. Today, our ESG Initiative is a systematic approach within Crane to support the communities in which we work and live and pursue systemic improvements in strategic areas such as water usage, energy savings, climate emissions and waste reduction.

Some of our initiatives have included:

- OPERATIONAL EXCELLENCE - to ensure waste streams are minimized. Crane Currency sites are ISO 14001 certified meeting the requirements for an effective environmental management system (EMS).
- INNOVATION - developing alternative energy sources resulting in substantial electricity generation from renewable sources, with commensurate decreases in emissions.

- WASTE LIFE CYCLE MANAGEMENT

- managing many of our by-products through recycling and reuse strategies. These efforts include water treatment and purification and composting.

Crane has a long history of caring for the safety of our associates and our environment. But we also remain vigilant for opportunities to improve our environmental performance while making the highest-quality, most sought-after paper and banknotes in the world. Our teams focus on using continuous improvement methodologies to innovate solutions to reduce waste, conserve energy and minimize our environmental footprint.

Crane Currency is an industry leader in making our business and communities economically, environmentally and socially sustainable. We are proud of what we have accomplished over the years and are happy for the opportunity to share these accomplishments with you.

THE RAW MATERIALS

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Since the 1800's, Crane has made its currency paper exclusively from tree-free raw materials - cotton and linen. We use several forms of cotton fibers for currency paper. The vast majority is recovered residual material. We use waste cotton that is not suitable for textiles and these fibers may be supplemented by staple cotton grown in the US Southwest.

A significant portion of the cotton used is short-fiber comber which is a by-product of the cotton processed for use in textiles. By supporting the fullest possible use of the harvested cotton crop, Crane Currency enhances the sustainability of the cotton industry. We actively pursue sources of

recycled cotton when available. Additionally, we capture the smallest fibers during waste-water treatment and compost these into topsoil for use by farmers or recycle them externally to tissue paper - completing the product lifecycle of the cotton crop.

Crane Currency is a member of the Better Cotton Initiative (BCI).



By helping farmers to grow cotton in a way that reduces stress on the local environment and improves the livelihoods and welfare of farming communities, BCI aims to create positive long-term change.





PRODUCTION

Crane Currency's use of water is carefully managed in concert with local governments and advocacy groups to minimize our impact on the water sources. A significant portion of the water used in processing is captured and re-used elsewhere in the manufacturing process to reduce the demand on public water sources.

In Dalton, MA, we capture 90 percent of the water used in processing and return it as surface water.

In Tumba, Sweden, a new water filtration system is estimated to reduce water consumption by as much as 500,000 cubic meters per year (130 million gallons) and removes cotton fibers for reuse in paper production.

Where practical we derive our water from artesian wells and nearby lakes rather than the local

public water sources to avoid direct strain on purified water capacity and economic impact to the community. Our direct air emissions are coordinated with local regulatory

agencies in order to ensure consistent compliance with permits - and we also follow ISO 14000 obligations for continuous improvements. Significant sources of volatile organic compounds are equipped with thermal oxidizers to minimize environmental impacts.

At the end of the functional life of the product, it is destroyed in a controlled manner consistent with central bank requirements, with composting and diversion of residuals conforming to individual central bank protocols.

90% RETURN

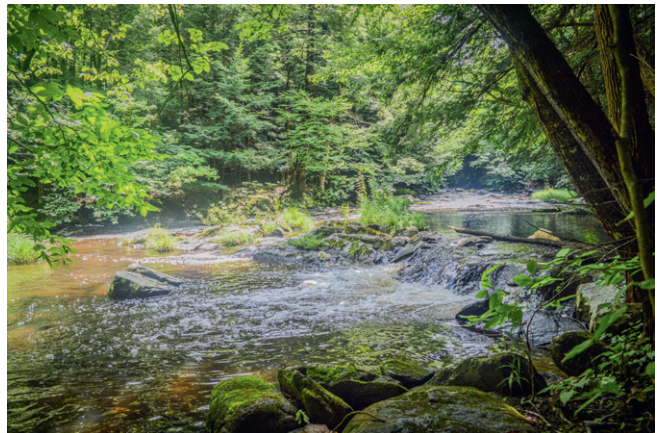




ENVIRONMENTAL STEWARDSHIP

Crane Currency has a long, sustained legacy in the area of environmental stewardship. We partner with local conservation organizations to improve water quality and donate unused land to increase the amount of protected green and open spaces for public use. This ensures these wonderful resources will be preserved and maintained for the enjoyment of the community.

The Berkshire Natural Resources Council agreed to take ownership of over 800 acres of Crane land to create a recreation and conservation district in Berkshire County. Over the past decade Crane Currency has given over 2,000 acres of land to local conservation groups.



WASTE PREVENTION AND ALTERNATIVE ENERGY SOURCES



Our sustainability ambition is to continuously improve and streamline production. The priority is always to recycle as much paper waste as possible internally and bring it back into production.

At our paper mill in Tumba, Sweden, around 60 percent of the paper waste has been recycled internally. The remaining banknote paper waste was previously sent to incineration at a local energy facility, generating heating and electricity for households and businesses in the southern Stockholm area.

Since 2022, 230 tons of shredded banknote paper are instead recycled by a consumer paper mill in the Netherlands, producing high-volume tissue paper, e.g., toilet paper, household towels and facial tissue. That is a natural and strategic step, decreasing our environmental footprint, lowering our financial costs, and meeting increasing external government and customer demands.



Our operations in Dalton, MA have two raw material processing mills and two paper mills.

Since 1996, all residuals from the pulp and paper manufacturing processes are recovered and composted. By mixing it with leaf and yard waste, these by-products of the currency paper production are shipped to a compost facility and some is direct land applied.

HUGE SOLAR FARM IN MALTA

Our modern banknote printing plant in Hal Far, Malta, has been designed with conservation in mind. The latest investment in 2022 was a huge solar farm covering 6,500 m² (70,000 ft²) on the roof of the facility. The solar panels will generate about 1,500,000 kWh annually, the equivalent of powering 378 Maltese households. They will also ensure that approximately 690 tons of carbon dioxide (CO₂) will be avoided being added to the atmosphere each year.



Other environmentally friendly initiatives in Malta include:

- LED lighting throughout the entire facility
- High efficiency motors of the latest generation
- Compressors designed with heat capture systems that optimally modulate the temperature in the facility



1.5

MILLION
kWh ANNUALLY

CHEMICAL SUBSTITUTION AND WATER PRESERVATION

During the paper manufacturing and printing processes, we thoughtfully select chemicals to create products of the best quality by consistently evaluating material alternatives in order to minimize environmental impact.

Using water from lakes and municipal water conduits consumes energy too. So Crane Currency has equipped its papermaking operations with fiber and water recovery systems that allow water to be captured and reused for appropriate processes.

In 2022, we invested in a new and massive water filtration system in the paper mill in Tumba, Sweden. It weighs a full 42 tons and is ten meters

long, three meters wide and three meters high. It is estimated to enable us to reduce water consumption by around 500,000 cubic meters annually. At the same time, the system captures cotton fibers for reuse, separating about 108 tons per year. The captured cotton fibers can then be returned directly to the papermaking process.

Water is also an excellent medium to store heat. Where appropriate, Crane Currency is able to capture the heat used in the papermaking process and use it in later processes saving not just water but energy as well.

ESTIMATED TO REDUCE
WATER CONSUMPTION BY
500,000 CUBIC METERS
ANNUALLY

CRANE'S ENVIRONMENTAL TIMELINE

1962: All Crane wastewater, previously discharged into the Housatonic River, is collected and treated at a central wastewater treatment facility.

1968: Additions made to Crane's wastewater treatment facility to further treat effluent.

1981: Crane partners with waste-to-energy company to use Crane's papermaking waste as a source of renewable steam energy.

1985: Water conservation projects begin to reuse water used in the raw materials processing and paper-making operations.

1986: Secondary treatment added to wastewater treatment.

1992: Crane undertakes energy-reduction program designed to reduce the company's electric consumption.

1993: Papermaking waste material is approved for composting and land application.

1994: Crane creates The Boulders Conservation Area in partnership with the Massachusetts Department of Fish & Game. The 685-acre property is dedicated to public recreation in perpetuity while protecting local aquifers.

1998: Crane becomes one of the first in the industry to be registered to ISO 14001 International Environmental Management Standards.

2000: Crane removes Old Berkshire Dam, restoring more than one mile of the Housatonic River to its original free-flowing condition. Crane was the first Massachusetts company to remove a dam.

2004: Crane and Housatonic Valley Association partner to develop the Dalton Hinsdale Housatonic River Greenway for public access and educational opportunities for local schools.

2013: Hydro-Electric generator commissioned at Byron Weston mill.

2015: Crane donates The Boulders parcel, 685 acres, to the Berkshire Natural Resources Council (BNRC).

2016: Crane donates the 126-acre Jericho Woods to the BNRC.

2018: Crane finishes construction on a new printing facility in Malta. The building is designed to have a low environmental impact through energy conservation and a closed-loop system for cleaning and reuse of intaglio wiping solution.

2022: Crane increases its waste management program at the paper mill in Tumba, developing new ways to recycle banknote paper back into production and sending shredded banknote paper waste to an external tissue paper manufacturer. An investment is also made in a new water filtration system that will greatly reduce the mill's water consumption. In Malta, Crane builds a new solar farm on the roof of the Malta printing plant supplying approximately 1.5M kWh of electricity annually.

ABOUT CRANE CURRENCY®

Crane Currency, a Crane NXT company, is a fully integrated supplier of secure, durable and well-designed banknotes for central banks all over the world. A pioneer in advanced micro-optics technology, Crane Currency provides a wide range of engaging visual effects in features that increase the level of security and public trust in banknotes. Client central banks benefit from Crane Currency's combined expertise in design, paper making and printing – and a culture of knowledge sharing and long-term partnerships. With over 200 years of heritage in the US, Sweden and Malta, Crane Currency is today a truly global company, as well as a trusted partner to over 50 central banks worldwide.

For more information, please visit
www.cranecurrency.com

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