Here Comes the Plastic Money

Polymer competes with paper as a basis for the world’s banknotes. Canada is the latest country to embrace plastic currency.

By Neil Savage on March 22, 2019

The Canadian dollar is worth as much as the U.S. greenback, but Canadians are about something else entirely: plastic money.

Last November, Canada introduced a plastic $10 bill, becoming one of about three dozen countries that have replicated at least some paper banknotes with bills printed on polymers. Beginning Monday, the Bank of Canada will begin circulating $50 bills made of the same material, and smaller denominations will follow next year.

The switch to polymer is the result of an effort to reduce one of the highest rates of counterfeiting among the world’s 20 largest economies. In 2004, Canada was trading $2.5 billion in fake currency for every dollar in circulation. The Bank of Canada says the new notes are easy to verify and hard to counterfeit.

The new Canadian $10 bill feels sickle, is hard to tear, and is thicker than paper. But the most notable difference is that it features one plastic material, including one in the shape of a peeled-edged maple leaf with a smaller, frosted sugar maple on it. Looking through the leaf at a point light source reveals a hologram that displays “$10.”

A second plastic variant, running vertically on the right side of the bill, contains a metallic portrait of a building that changes color when the note is moved. It makes a “crinkle” for professionals to counterfeit,” says David Hunter, strategic marketing manager at Securitron International, the Australian company that produces the polymer substrates currently used in all polymer bills (including the Canadian ones). Australia was the first country to introduce plastic currency, with a commemorative $5 note in 1992, but began replacing its paper money in 2002.

The substrate consists of layers of specially treated polymers—a plastic commonly used for packaging stocks or luggage linings. Thickness can be varied for the plastic or a layer of printed carbon, as well as some security features. Lots of the extraction has been plugged to individual countries, where problems can add additional features determined by the country’s central bank.

Melanesia saw the introduction of the sheet through variations and other features make it hard for a person working with a press and a press to replace the polymer note. That immediately undermines what he calls “counterfeiting,” in which a person in need of cash depends on a quick and easy forgers to be able to sell many sophisticated forgery of organized crime or large governments. North Korea has produced nearly 10,000 copies of U.S. $100 notes. But the polymer’s features don’t make it easy.

Every country that has introduced polymer banknotes has seen a decrease in counterfeiting, says Shane Silkas, a polymer-banknote collector in Washington, DC, who has been working with collectors and governments working with the polymer money. “The challenge is to stay ahead of the counterfeitors in this game,” Silkas says. “They will eventually catch up, but you just Everything you do to make counterfeiting as much as possible makes it worthwhile to the polymer banknotes, but not in the future.”

Some are skeptical about the advantages of plastic money, including Douglas Crane, vice president of Crane and Co., the Massachusetts company that makes the polymer bills. U.S. currency is printed on Crane doesn’t think the polymer bills are too hard to fake, and says that he expects the switch to $20 and $50 polymer notes won’t be as successful. “They are a way to high counterfeiting problem on the 50 percent,” he says.

Still, even countries that have stuck with paper bills are incorporating plastic into them. The next version of the U.S. $100 bill will contain a thin strip made of about 90,000 polymer micrometers, when it’s fully printed, the notes will reveal one of two images beneath the Liberty Bell on the reverse 155. The bill also features the changes in color when moved from different engines. The new $50 bill was released in April, 2016, but that didn’t stop counterfeiters from making copies, according to the U.S. Treasury Reserve.

Polymer notes cost about twice as much to produce as paper ones, but they could ship it in circulation longer. A study requested by the Bank of Canada estimated that the two bills would last two and a half times as long as paper notes. Security means they last four times as long.