



ROYAL CANADIAN MINT
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**Statement to the
United States House of Representatives Committee
on Financial Services**

***Subcommittee on Domestic Monetary Policy
and Technology hearing on
“The Future of Money: Dollars and Sense”***

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Good afternoon. I want to thank Chairman Bachus and the respected members of this committee for inviting me to testify, on behalf of the Royal Canadian Mint, on Canada's experience with replacing the \$1 bank note with a circulation coin, as well as with the introduction of an innovative coin plating technology which has dramatically improved the cost-effectiveness of circulation coins, while also improving their reliability and security.

The Mint continuously strives to improve products and services for our customers and we are quite proud of what we have achieved within our circulation coinage business, for the benefit of Canadians, as well as our international customers, since the introduction of our one-dollar circulation coin in 1987.

Although we have twice successfully managed the replacement of a low-denomination bank note with a circulation coin (with the one-dollar coin in 1987 and a two-dollar coin in 1996), our record of maximizing the benefits to our circulation coins now encompasses a broad range of innovations, among them:

- Our patented **Multi-Ply Plated Steel (MPPS)** technology, first introduced on our 1-, 5-, 10- 25- and 50-cent coins in 2000 to create the most economical, durable and secure coins on the market by plating thin alternating layers of nickel and copper over a steel core –a technology used in over 70 coin denominations in 30 countries. The Mint now uses it on all Canadian circulating denominations since the launch of MPPS \$1 and \$2 coins in April 2012;
- Our **Alloy Recovery Program**, through which we continue to recover older alloy coins, extract their nickel content; generate revenue through bulk nickel sales; and replace the coins with new multi-ply plated product. This program has also streamlined the number of coin compositions the vending industry has to read;

- Our **Coin Recycling Program**, which allows Canadians to easily put their coins back into circulation and is a more efficient and environmentally-friendly way of supplying the market with coins by reducing the number of new coins the Mint needs to produce. Since June 2005, over six billion coins have been re-circulated through this program;
- Our **High-Speed Circulation Coin Colouring** process, introduced for the first time in 2004 on a 25-cent circulation coin honouring Canadian veterans. The Mint led the industry with this technology and it continues to evolve through ever-complex applications on new commemorative circulation coins, as well as coins for international customers;
- Our new Multi-Ply Plated Steel \$1 and \$2 coins with **Virtual Image** and **Laser Mark** security features ideally suited to high-value circulation coins;
- Our **Digital Non-Destructive Activation** (DNA) technology, by which the surface of every new \$1 and \$2 coin is essentially “fingerprinted” to store a unique code of that surface structure in a database. Although Canada does not have a coin counterfeiting problem, this anti-counterfeiting innovation has been proactively adopted to make our currency system even more robust, as well as to help our international customers add a potent new layer of security to their coins; and
- While a Bank of Canada Study in 2012 concluded that "cash is still the predominant payment method in terms of volume for 54% of transactions", we launched our **MintChip** research and development project to test a digital currency solution with all the features of cash, to explore the potential role of the Mint in an alternative payment world.

This highlights only a 12-year span of innovation specifically developed for the circulation coin market, but which can find application in other areas of our business, which includes collector and investment coins, and refinery operations.

While our strong focus on innovation helps the Mint compete for a greater share of the world plating market, as well as increased collector coin and bullion product sales, and fund our operations without taxpayer support, its most important outcome is our enhanced ability to meet changing customer needs while making our coinage system more robust, efficient, and reliable.

It is in this context that Canada's replacement of its one-dollar bank note with a circulation coin, and the later introduction of the two-dollar coin, can be deemed a success, from the perspective of the Mint and all end-users of Canadian currency.

Having already pointed to a number of innovations which point to the Mint's unique expertise, it is important to highlight another important and defining characteristic of our business which is the forecasting of coin inventories and the management of the coin distribution system across Canada. With distribution centres in 12 cities; 29 coin pools; and 2,000 forecasts per week, this end-to-end management of the coin supply makes us unique among the world's mints.

We also lead financial institutions and armoured car companies in managing the circulation of these coins through a network of distribution centres across Canada.

This requires timely production of Canadian circulation coins, which we consistently supply in response to market demand. By virtue of this approach, we avoid building significant inventories and prevent shortages of any denomination as we meet the fluctuating needs of Canadian trade and commerce. The prevention of coin shortages is an important performance measure for the Mint and we are proud of not having allowed any coin shortage, without building excess inventory, over the last five years.

This was an important ingredient to the success of both our past conversions from bank notes to coins, which placed a high burden of public expectation on the Mint.

Our one-dollar circulation coin was proposed by a Parliamentary committee as an outcome of public hearings in 1985 and although principally a cost-saving measure, several business and special interest groups suggested other benefits could be realized such as:

- It would be easier for transit companies to process coins than bills
- Vending machines could expand product lines and provide faster service to customers
- Organizations for the visually impaired appreciated the coin's eleven-sided, distinctive shape

Stakeholders and consumers were very receptive to this new coin. Public opinion polling revealed largely positive to neutral attitudes to the new coin and demand actually eclipsed the projected initial requirement of 250 million coins over the first three years. Instead, almost 600 million coins were produced to adequately supply the marketplace.

Canadians have come to embrace the one-dollar coin, which they nicknamed the Loonie by virtue of its iconic bird design, and use it as they would any other coin.

In a June 2012 online poll conducted on the Loonie's 25th anniversary by the CBC, Canada's public broadcaster, almost 70% of Canadians identified the coin as a recognizable symbol of Canada and many of those consider it a national icon equal to the beaver and maple leaf.

Despite our ability to manage production and distribution in the face of three-fold demand, our only hurdle was the continued production of the dollar bank note until 1989. This phased approach proved the only barrier to full scale adoption of the coin, which occurred soon after the last bank note was printed.

This was a lesson learned by the time Canada saw the introduction of the \$2 circulation coin, which was simultaneously met by the end of two-dollar bank note production.

Lasting 25 years instead of one year for a bank note, the one-dollar circulation coin has saved the Canadian government \$175 million over its first 20 years. It generated \$450 million in seigniorage (the difference between the cost manufacturing and distributing a coin versus its face value, paid directly to the government) in its launch phase.

Today, the multi-ply plated steel \$1 coin launched in 2012 has the same or better life, an even higher seigniorage potential and, along with the new \$2 multi-ply coin, generates a combined additional \$15 million annual cost savings to the government of Canada.

Since April of this year, all new Canadian circulation coinage leaving our Winnipeg, Manitoba facility is multi-ply plated steel.

Through this technology, a harmonized coinage system is minimizing costs for the Government of Canada and maximizing seigniorage revenue.

It is also widely supported by multiple stakeholders with whom the Mint worked closely and proactively to facilitate the transition from expensive, traditional alloy coins, to the most economical, durable and secure coins in the market today.

Our successful introduction of these coins depended on getting the message out early and often to all our stakeholders and in the case of the vending industry, we were able to provide first notice of this change in 2008, fully four years before the new coins started circulating this April. This allowed us to develop coins with the same look and feel as existing \$1 and \$2 coins despite the radical improvements they now contain.

These new coins were developed in partnership with industry and even though there were costs to operators of coin-operated equipment, our strategy of communicating early and frequently with stakeholders to facilitate the transition to new coins was widely praised.

Official statements such as that of Neil Madden, President of the Canadian Automatic Merchandising Association, summarize the merits of our initiative and its implementation:

“While no one in our industry wants to see a change that will cost us money, we do applaud the effort of our government to find cost savings. Our relationship with the Mint is strong and we value them as a partner in our industry”.

Validation of our technology and implementation strategies by Canadian stakeholders is being echoed by stakeholders and customers beyond our borders.

Central banks around the world are looking for cost-effective and reliable alternatives to their expensive 100% alloy coins. These are customers who have much to gain from emulating the \$250 million savings multi-ply plated steel has realized for the Canadian government since 2000.

We saw a pronounced shift in the international popularity of our technology when New Zealand changed all its coins to our multi-ply plated steel in 2005 and saved millions of dollars as a result of this decision. Since then, circulation coin customers on every continent are using our technology.

And as we are completing a 70,000 square foot expansion of our Winnipeg plating facility, we are looking forward to soon announcing our agreement with an Asian customer whose similar conversion to multi-ply plated steel has become the largest foreign circulation contract in our history.

I should add that industry partnerships have been very influential in the Mint’s success in selling new technologies and as a case in point, our partner and licensee Jarden Zinc of Greeneville, Tennessee has been instrumental in helping us deliver multi-ply plated steel products to our international customers.

The Royal Canadian Mint is committed to advancing the science of coin engineering and manufacturing for the benefit of all its customers and stakeholders.

We are mindful of our core mandate, to support the needs of Canadian commerce by producing and distributing Canada's circulation coinage.

We have the added responsibility of managing the costs of delivering this mandate and being consistently profitable as the Mint is a self-financing agency which does not rely on any taxpayer support despite being 100% owned by the Government of Canada.

We have more than met this goal with the combined profits of the last five years eclipsing those of the previous 25. We achieved record revenues of \$3.2 billion in 2011, netted profits of over \$43 million and paid a record dividend of \$10 million to our exclusive shareholder; the Government of Canada.

Through our many innovations, we have also found ways to improve the integrity of our coinage system with coins that incorporate better security and perform reliably. We also value the strategic relationships we have built with industry stakeholders and consumer groups to create and introduce innovations which benefit the end-users of our products.

The Mint will continue to invest in research and development to keep generating solutions which meet the ever-changing needs of the marketplace and we look forward to sharing our knowledge and expertise with currency issuers all over the world looking for the best, common sense solutions to improving their coinage.

Thank you again for inviting the Royal Canadian Mint to appear before your Committee and it will be my pleasure to answer your questions.