



IPCA

INTERNATIONAL
POLYMER CURRENCY
ASSOCIATION

THE NEW PARADIGM IN CURRENCY

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Going for gold at the Sydney 2000 Olympics



International visitors use the environmentally friendly Australian polymer banknotes.

AMONG THE SPECTACLE OF sporting events and pageantry of the recent Sydney 2000 Olympics, polymer banknotes paid for tickets, transport and entertainment. Polymer banknotes took the number one podium in generating interest and winning the trust of the visiting athletes and spectators.

'In excess of AS140 million was transported into and out of Olympic venues', says Aub Chapman, Chief Manager Operational Control, Westpac Bank, which was the official bank for the 2000 Olympic Games. 'Better still, the Westpac Bank staff servicing spectators, visitors and athletes at Olympic venues, nearby suburbs and central Sydney, were able to provide us with some interesting feedback'.

'Some visitors were amazed by the vibrant colours of the polymer currency while others noticed the feel of the 'plastic' banknotes. There were many enquiries about the purchase of new or near new banknotes to take home as collectables,' Aub continues.

It is only natural this kind of feedback is driven by aesthetics given the short-term exposure of the currency. For some of the visitors, the real features such as the quality, security and recycling capability went unnoticed, as they are not so apparent to the naked eye. While durability of the polymer banknotes didn't matter so much over the two week period, lifespan certainly won't be an issue when retained as a souvenir.

The Bank of Papua New Guinea celebrates 25 years of Independence



The front of the 10 Kina polymer banknote.



The back of the 10 Kina polymer banknote.

IN SEPTEMBER 2000, THE BANK of Papua New Guinea released commemorative 2, 10, 20 and 50 Kina banknotes to mark its 25 year anniversary of Independence.

The national emblem of Papua New Guinea, the Bird of Paradise, was the inspiration behind the design, which has been well received by the people.

Being so durable, polymer banknotes are particularly well-suited to the high humidity in Papua New Guinea.

Security features include a transparent window printed with the Bank of Papua New Guinea logo and a shadow image of the logo when the note is held up to the light.

Polymer reaches the masses

WHILE ECONOMIES SUCH AS Australia, New Zealand, Papua New Guinea and Brunei amongst others were first to embrace polymer technology, the People's Republic of China has moved the paradigm by issuing 10 million commemorative 100 Yuan polymer banknotes. This is a way of officially welcoming the new century.



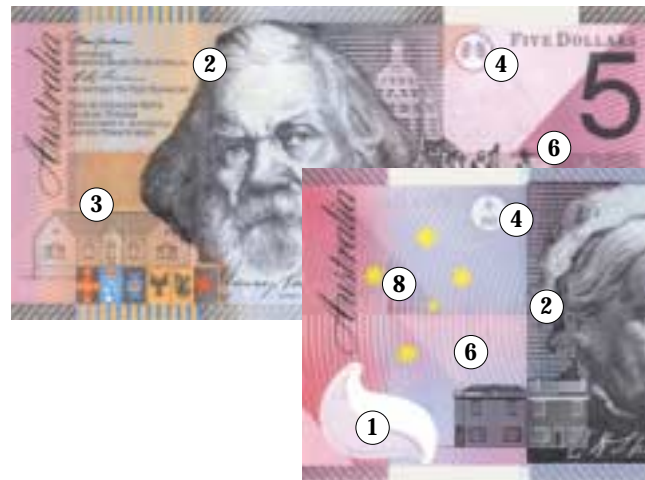
The commemorative 100 Yuan banknote shows a flying dragon on a gold background.

Predominantly gold in colour, the 'flying dragon' is the essence of the design, along with other auspicious images. The back of the note features the China Century Altar, the national emblem, the Pinyin of People's Bank of China and languages of minority countries.

The 100 Yuan banknote incorporates the Diffractive Optical Element (known as the DOE™ feature) showcasing the Middle Kingdom (the national symbol for China). This is one of the latest high security developments in polymer banknotes achieved by applying a diffraction grating into the clear window of the banknote.

This feature can be viewed by holding the note close to the eye and looking toward a light source such as a spotlight, candle, car headlight or even the moon. Alternatively, a small hand-held laser beam can project the image onto a flat surface.

New polymer banknote salutes prominent Australians



The front and back of the new \$5 banknote contain numerous security features, outlined below.

AUSTRALIA WILL CELEBRATE THE Centenary of Federation throughout 2001. As a contribution to the celebrations, the Reserve Bank of Australia has issued a new \$5 polymer banknote from 1 January 2001.

The new banknote features two prominent Australians who made unique contributions towards their nation. On the front is Sir Henry Parkes, commonly known as the 'Father of Federation'. On the reverse is Catherine Helen Spence, journalist, social reformer and novelist, and the first woman to stand for election to the Public Office in Australia.

Like all Australian banknotes, the new \$5 note has a number of special anti-counterfeiting features that make the Australian currency amongst the safest in the world.

The following security features are incorporated in the new \$5 note (as indicated above):

1. The clear window has a special shape to match the design elements of the note, along with embossing of the number '5'.
2. Intaglio printing can be felt by running a finger or fingernail across the main design elements, such as the portraits, the denomination numeral and the word 'Australia'.

3. The words of the Tenterfield speech (front) by Sir Henry Parkes and Advance Australia Fair (back) have been printed in microprint behind the portraits and can be read with the aid of a magnifying glass.

4. The see-through register of a seven-pointed star within a circle is formed by four points on one side of the note combining perfectly with the three points on the other side when the note is held up to the light.

5. The self-authenticating Micro-SAM® feature includes a see-through screener in the window, which is used to view the image '5'. The screener and image are composed of a series of very fine lines viewable under a microscope. Micro-SAM® is also a deterrent against photocopying.

Micro-SAM® is a registered trademark of Joh. Enschede Security Solutions.

6. Intricate, multi-coloured, fine-line patterns and images appear on each side of the note.

7. The serial number of each note is printed vertically on the back of the note. Under ultraviolet light the serial number fluoresces.

8. Multi-coloured fine line security patterns are printed on each side of the note and the words 'FIVE DOLLARS' become visible under ultraviolet light.

Humid climate tips the preference for polymer currency



The 10 Taka banknote in hues of red shows a portrait of the Father of the Nation, Sheikh Mujibur Rahman, the Batul Makkarum National Mosque and the national bird, the Doel.

ON MARTYRED INTELLECTUALS DAY, 14 DECEMBER 2000, THE BANGLADESH Bank issued the new 10 Taka polymer banknote. Hundreds of people queued before the Central Bank to collect the new note.

Bangladesh is the latest in a growing number of countries to introduce polymer banknotes. As the eighth largest country in the world with a population of more than 140 million, it is a significant step in the international acceptance of polymer currency.

Dr. Farashuddin, the Governor of the Bangladesh Bank, voiced his confidence in polymer, stating 'We have started our advance with the 10 Taka polymer banknote, and gradually, we will print all our banknotes on polymer. Polymer is much more secure than

paper notes. Although initially the cost is higher, considering the longevity of the note, it is much more profitable in the end'.

Extremely harsh circulation conditions can rapidly deteriorate the quality of notes and cause problems with machine processing.

High temperatures and humidity, both of which are common in Bangladesh, have an adverse effect on traditional paper notes.

With polymer technology, a non-porous texture renders the banknote impervious to moisture and resistant to water, sweat, oils and other contaminants, thus making them ideal for the local fish and vegetable markets.

Security features incorporated in the 10 Taka banknote include the shadow image of the Royal Bengal Tiger and the clear window with a Water Lily vignette, which also make polymer banknotes more difficult to counterfeit.

Currency Conference 2001: A Banking Odyssey



View of Barcelona, host to the Currency Conference.

KNOWN FOR ITS GRACE AND hospitality, Barcelona is one of the most desired international travel destinations and soon to play host to the Currency Conference.

Organised by the Currency Office, the conference is held every 18 months and runs from Sunday 8 April to Wednesday 11 April 2001. The conference will be held at the Hotel Rey Juan Carlos I, located in one of Europe's most prestigious financial and commercial precincts.

Day lessons include topics covering:

- The Y2K Problem: Lessons Learnt
- The Future of Money
- New Developments in Banknote Papers
- Preparing Systems for the Euro Change Over
- New Forms of Authentication.

Central Banks and Commercial Banks, Banknote Printers, and other industry suppliers and consultants will contribute to the programme.

For more information on the 2001 Currency Conference, visit the conference website

www.currencyconference.com

or contact Victoria Alanis by telephone

+1 817 801 6757.

Commonly asked Questions

Q. The security thread and the watermark on cotton paper banknotes are included during the paper manufacturing process. How are these features incorporated into polymer banknotes?

A. The security thread is incorporated in the polymer-based substrate during the opacification process. This can be either used as a simple visual device or in a continuous or windowed form of enhanced security. The thread could also carry a machine-readable feature like magnetics.

Polymer notes have a 'shadow image' which provides a clearer result than the watermark in paper notes. Again, the shadow image is incorporated in the polymer note during the manufacturing process. The shadow image is superior to a watermark to the extent that it can incorporate the full range of tonality from complete transparency to complete opacity. It maintains tonal integrity even after extended circulation and lasts for the life of the banknote.



A 'shadow image' of Captain Cook.

Q. Can polymer banknotes be recycled?

A. In these days of environmental awareness and community concern about waste disposal, polymer banknotes offer an environmentally friendly alternative to the paper banknotes, which are usually buried in a high security waste dump when withdrawn from service. Polymer banknote waste and polymer notes

unfit for use can be recycled. The polymer notes are granulated and extruded into small pellets or granules. These are then used as raw material in the manufacture of a range of everyday plastic products such as wheelbarrows and other garden products.



Polymer banknotes can be recycled into useful garden carts.

Q. How do polymer banknotes react to heat?

A. Over the past ten years and prior to the issue of polymer banknotes in Australia, a series of extensive tests have been undertaken across a range of temperature and humidity conditions. These conditions equate to the most challenging of climates.

Additionally, polymer banknotes were subjected to the same stringent high temperature testing a car dashboard undergoes – a process extensively used by motor vehicle manufacturers.

Overall, the findings were very positive, showing that polymer banknotes will tolerate temperatures in excess of 120°C before significant shrinkage occurs, which is well in excess of normal temperatures.

Ironing, which is sometimes used to flatten paper banknotes, isn't required nor appropriate with polymer banknotes and an accidental hot wash in the washing machine can be tolerated without any damage.

Viewpoint

SINCE THE FIRST ISSUE OF THE IPCA newsletter in September 2000 we have seen the release of a number of new polymer banknotes around the world including China, Bangladesh, Papua New Guinea, and Romania. In addition, Banco Central do Brasil continues to issue its new 10 Reais note into wider circulation.

The past twelve months have heralded unprecedented growth in new issues of polymer currency. With this growth comes further confirmation from Central Banks that the polymer banknote is the preferred choice for the cash handling community and the general public.

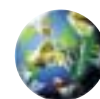
Rest assured that IPCA will continue to keep you up-to-date with the new standard in banknote technology via this newsletter. After all, the first issue sparked great interest from around the world.

We would like to take this opportunity to thank you for your positive feedback and encourage your comments and questions.

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