



The LBMA (LPPM) Precious Metals
Conference 2011
Montreal, Canada

Conference Summary

Edel Tully
UBS



Opening Session and Welcome

Introductory Remarks

David Gornall, LBMA Chairman



The Regulatory Affairs sub-committee

- Dodd Frank law
 - Created daily forward price curves to allow clearing of OTC forward gold
 - Addendum on conflict minerals – direct representation to the SEC; guidance on supply chain due diligence to be followed by all good delivery refiners
- Basel III
 - Working with the World Gold Council in its initiative for gold to be considered as a tier 1 asset
 - A survey of all leading members reveals that average daily turnover of gold is approx US\$240 bn, 90% of which are spot trades
- Educational push spanning lawmakers, government agencies and members



3

Keynote Speech: What a Difference 10 Years Can Make

Pierre Lassonde, Chairman, Franco-Nevada

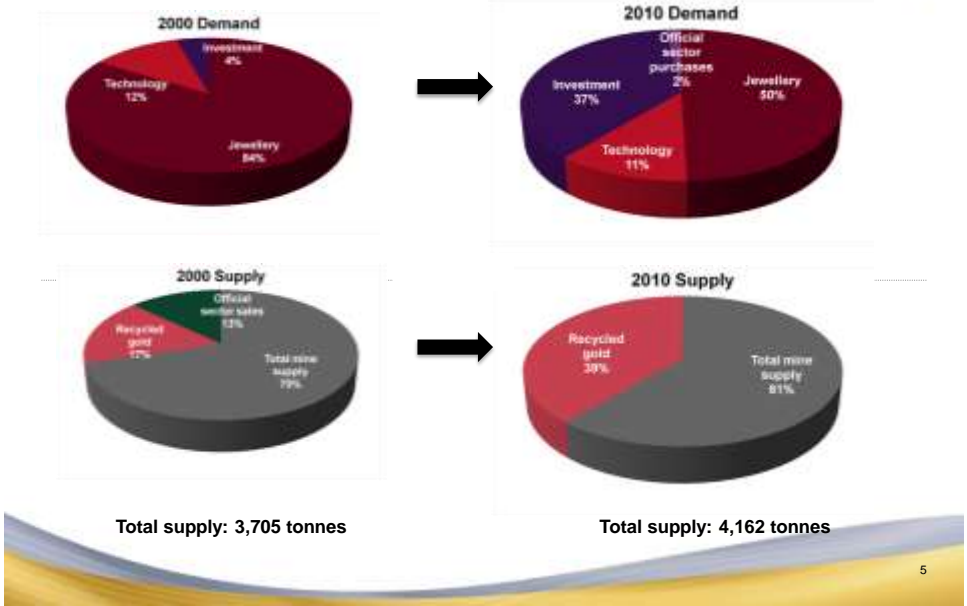


- Investment demand exploded from 4% in 2000 to 37% in 2010
 - But global allocations to gold remain small – 1% of global assets under management (31,000 tonnes)
- Official sector moved from supply side to demand side
 - Asian CBs gold reserves at 2.6% of total vs 58% in Western CBs
- Jewellery demand contracted to 50% in 2010 from 84% in 2000
 - Dominance shifts from US and Europe to India and China
- Supply of recycled gold expanded to 39% from 17%
 - Threatens to exceed mine supply given constraints to production growth



4

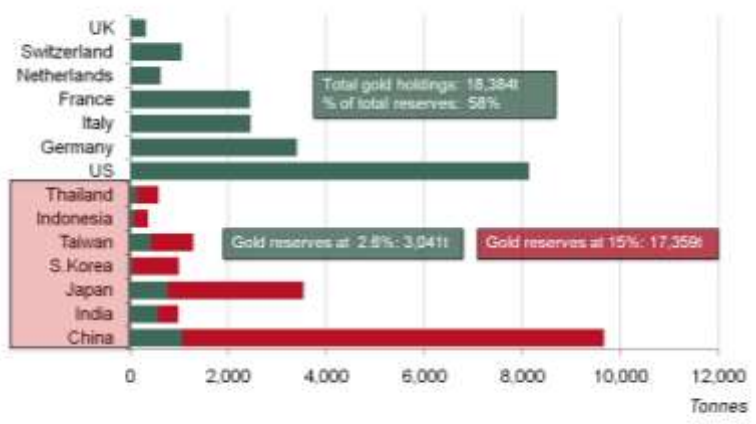
10 years of change in the gold market...



If Asian majors held 15% of their reserves in gold



Central bank gold holdings in tonnes



Source: IMF IFS, World Gold Council

Global allocations to gold remain small



Global assets under management (US\$128 trillion)



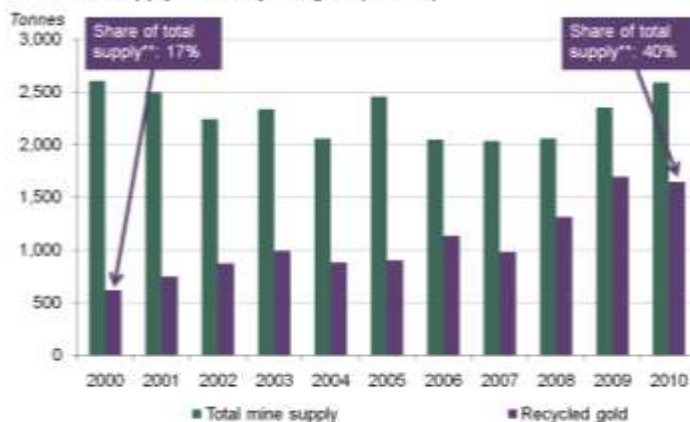
*Gold calculated using 2010 average price of US\$1224.5, global 2010 AUM of US\$128 trillion
 Source: IMF, IFSL, Cap Gemini, Morgan Stanley, Preqin, Hennessy Group, FT.com, The Boston Consulting Group



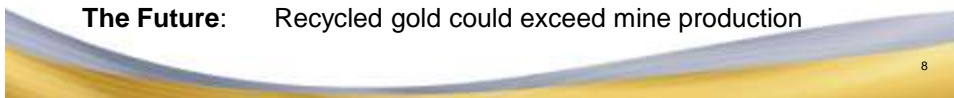
Growth of recycled gold supply



Total mine supply* and recycled gold (tonnes)



*Mine supply= mine production net of producer hedging. **Total supply includes official sector activity, not shown here
 Source: Thomson Reuters GFMS, World Gold Council



The Future: Recycled gold could exceed mine production

Regulation and the Precious Metals Industry

Barbara Ridpath, Chief Executive,
International Centre for Financial Regulation



Dodd-Frank Act

- OTC derivatives
- Conflict Minerals Amendment

Should gold be included in liquid assets definition?

Issues to watch out for

- Consistency of US and EU law on derivatives
- Inclusion of precious metals in G20 and Cannes summit emphasis on commodities
- Dodd-Frank impact on US residents' OTC trading of precious metals

Lessons for the bullion market

- Selective engagement, Stay up to date
- Base opinions on accurate facts
- Demonstrate transparency and market liquidity through improvement in available data and statistics

9



Session 2: Precious Metals Investment – Laying the Foundation

Chairman: John Reade, Senior Vice President, Paulson Europe

10

Economic Storms: The Background for Precious Metals

Avery Shenfeld, Chief Economist & Managing Director, CIBC



- High inflation (generally in good times)
 - More of an EM issue, but could be used by developed markets to address high debt/GDP down the road
- Sinking US dollar (generally in good times)
 - Story has run its course – trade looks to be turning, except against some EM currencies
- Sinking equities (generally bad times)
 - Choppy markets in near term, but should recover if no recession/further escalation in Eurozone sovereign debt/banking crisis
- Low interest rates (generally in bad times)
 - Gold's best friend for now
 - Slack in economy keeps Fed on hold through 2013, but sticky wages make deflation and QE3 less likely

11

Are All Commodities the Same: Precious Metals Versus Other Commodities

John Fallon, President, Pia Capital Management



- Gold is very different to other commodities: it is monetised, or quasi-monetised or as John also said 'its in a different orbit'.
- Gold is a lot more liquid
- ETFs have lifted gold from the secular world of commodities – without them, gold wouldn't be trading +\$1800
 - Taken gold from the 'ash-heap' of relics
- It's a thermometer
- Listen to your wife...

12



The Realpolitik of Gold

James Steel, Precious Metals Analyst, HSBC Bank USA

- Gold and corruption
 - Public opinion on corruption accelerated following the financial crises – supportive for gold
- Public dissatisfaction ratings move in tandem with gold prices
- Negative correlation with presidential approval ratings – long live Obama
- Loose correlation between gold and Democratic majorities in the US House and Senate
- Gold rallies with food prices
- Free markets tend to be negative for gold, government intervention positive

Gold and Obama's approval/disapproval ratings



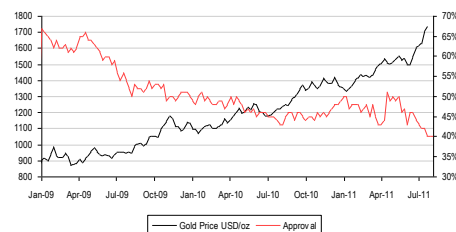
Gold has traded inversely to President Obama's popularity

A look at gold prices during Mr. Obama's time in office shows that gold's low coincides with his highest approval rating and his lowest disapproval rating, set during the week of his inauguration

Gold prices began to accelerate in April 2010 as Mr. Obama's approval rating fell below 50%

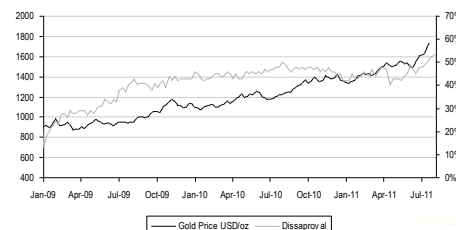
Gold prices hit new highs above USD1,800/oz as Mr. Obama's approval rating fell and his disapproval rating continued to rise

Approval ratings



Source: Gallup, Bloomberg

Disapproval ratings



Source: Gallup, Bloomberg

The Macro Case for Gold - \$500 or \$5000?

Douglas J. Hepworth, Director of Research,
Gresham Investment Management LLC



- No coherent metric of value for gold
- Conclusion from valuation models - Gold's value is not absolute and gold's relationships to other factors are not absolute
- Policy perspective – US selling its gold reserves to reduce debt
 - Ahistorical solution
 - Make a two-sided market at \$20,000/oz
 - Gold-backed currency
 - How many transactions?
 - Does not reduce the debt

15



Session 3: Precious Metals Investment – The Hedge Fund View

Chairman: Tony Boeckh
President, Boeckh Investments Inc.

16



Gold Investment: Metal, Equity or ETF?

Jean-Francois Pages & Jerome Berset, Swiss Precious Metals

- Let's get physical...and allocated



The search for super-secure tangible assets across the board

- Private smart money
- Institutional – University of Texas Investment Management Co
- Sovereign states – Venezuela

17



The Case For Silver

Som Seif, CEO, Claymore Investments Inc

Strong Fundamentals

- Supply
 - not increasing substantially
- Demand
 - Fabrication eats up majority of annual supply
 - Industrial demand – economic recovery; emerging industrial applications
 - Investment demand – economic uncertainty: economic dislocation, currency devaluation/risk, portfolio allocation
 - Not a lot of room left for investor demand
- Silver still well below its historical peak in real terms
- Prices to reach new highs on attractive supply/demand fundamentals (think I heard \$100!)

18



Platinum Group Metals – A Fund's Perspective

Christoph Eibl, CEO, Tiberius Group

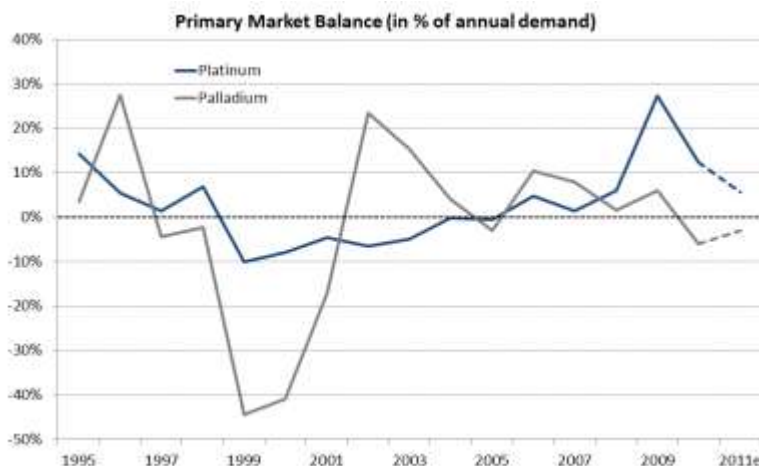
- Perspective for Q3 2011: overweight palladium, neutral platinum
- Platinum
 - + production cost inflation in main producer South Africa
 - + risk of mine closures due to strikes and safety issues
 - + jewellery buying on dips from Asia providing a floor
 - + cheap relative to palladium and gold – platinum/palladium substitution to kick in when ratio moves below 2
 - - market in sustained surplus
 - - no demand growth over the last 10 years
- Palladium
 - + higher exposure to BRIC – gasoline cars
 - + market moving into deficit
 - + Russian state inventories likely close to depletion
 - - at risk should BRIC sentiment shifts negatively
 - - jewellery market too small to absorb decline in autocatalyst demand

19

Fundamentals Matter....



Platinum in a sustained surplus, palladium in deficit



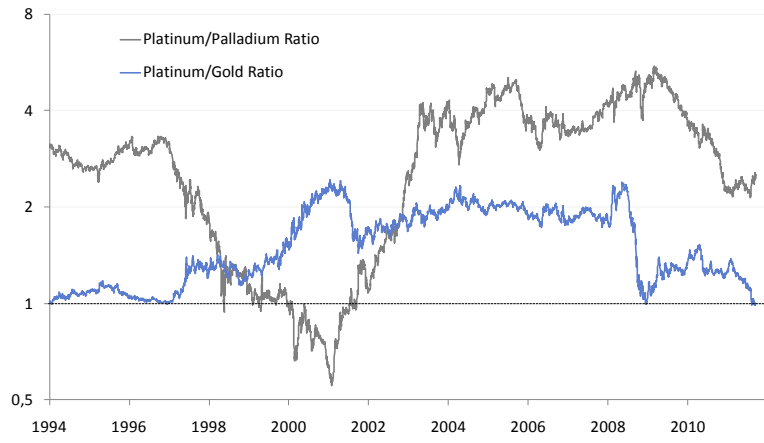
Source: Johnson Matthey, Tiberius estimates

20

Relative Pricing



Platinum remains "cheap" compared to other precious metals



Source: Bloomberg



Session 4: PGMs Fundamentals – Filtering Fact from Fiction

Chairman: Tom Kendall
Research Analyst – Precious Metals, Credit Suisse

Increased PGM Demand for Mobile Off-Road Heavy Duty Equipment

Ben Tiley, Global Account Manager, Johnson Matthey Inc



What Drives Off-Road Heavy Duty Need for Catalyst?

- Government Regulations
 - Regulations phased in by engine size – bigger engine = more catalyst; smaller engine = more engines
- The state of the economy and customers

Global Regulations

- US, EU and Japan – using similar engine size phase in approach
 - Tier 4 Interim in US = Stage IIIb in EU
 - Tier 4 Final in US = Stage IV in Europe

Possible Future Regulations – Fuel economy/CO2-based legislation

- Europe: defined for cars and expected for trucks in the near future
- US: proposed for cars and both medium- and heavy duty trucks
- Japan: already defined and tax incentives are in place

23

What Drives Off-Road Heavy Duty Need for Catalyst?



- Government regulations
 - 2007 – On Road: DOC, CSF
 - 2010 - On-Road: DOC, CSF, SCR
 - 2011-2013 – Tier 4 Interim Off-Road: DOC, CSF
 - Regulations phased in by engine size >130kW, >56-130kW, <56kW
 - Bigger engine size = more catalyst, Smaller engine size = more engines
 - 2014-2016 – Tier 4 Final Off-Road: DOC, CSF, SCR, ASC
 - Regulations phased in by engine size >130kW, >56-130kW, <56kW
 - Bigger engine size = more catalyst, Smaller engine size = more engines

24



Cliff notes still required....

- Off-Road is NOT Like On-Road
- High Level of Complexity
 - About Two Dozen Engine OE's (~ 6 Major)
 - About 600 Machine OE's (~ 10 Major)
 - Power Range is < 5 HP to greater than 750 HP (10,000+ HP)
 - Many, Many, Many Specialized Applications
 - Severe and Diverse Operating Conditions

25

Crumbs On The Table? The State of The Southern African Platinum Industry

Stuart Murray, CEO, Aquarius Platinum Ltd



The (disappearing) Platinum Cake, rand basket price is R10,500/PGM oz

- Labour gets the biggest piece – 38%
 - Double-digit wage increase each year
- Royalties are currently modest at 1%, but there is scope for increase
- Electricity at 6%
 - 27% increase for 3 years, with more to come
- And more: oil-related, steel, etc etc and then a 28% tax on what's left over
- Stay-in-business Capex – 14%
 - the “forgotten cost” and biggest problem facing the platinum industry
- Less than 3% left for shareholders (who take all the risk)
- Reality: PGM prices must increase, or rand weakens, or both

26



Chinese Statistics: Lost in Translation?

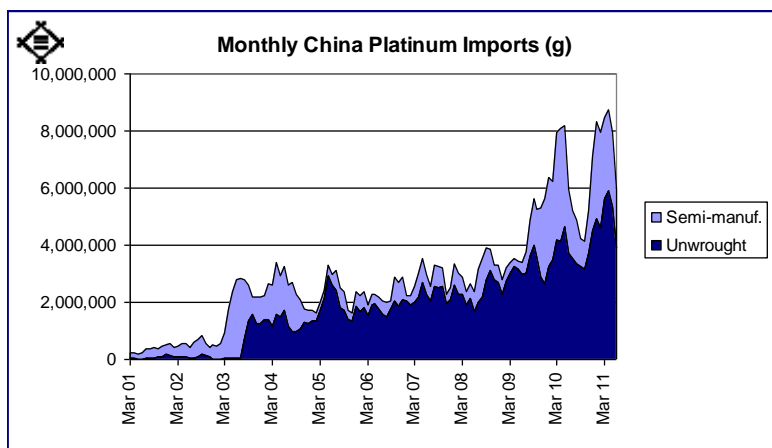
David Jollie, Strategic Analyst, Mitsui & Co Precious Metals, Inc.

- Imports do not reflect demand very well – should only be relevant for a few applications: jewellery and investment
- Metal going through Hong Kong declined after the establishment of the SGE contract – opportunity to buy tax-free metal
 - Late 2008-early 2009 flows to Hong Kong solely investment related
- SGE sales of platinum generally representative of imports until mid-2009 – divergence suggests new source of demand
- Above normal levels of semi-manufactured imports at above-normal prices is probably for investment
 - Not jewellery – demand doesn't follow prices higher
 - 2008/2009 flows driven by soft loans; 2010/2011 suggest some real demand or stock building
- Gold/platinum price differential – high platinum premium reduces demand, although some segments are resilient
- Jewellers buy on dips on the SGE - proportion is increasing

27



Investment: metal form

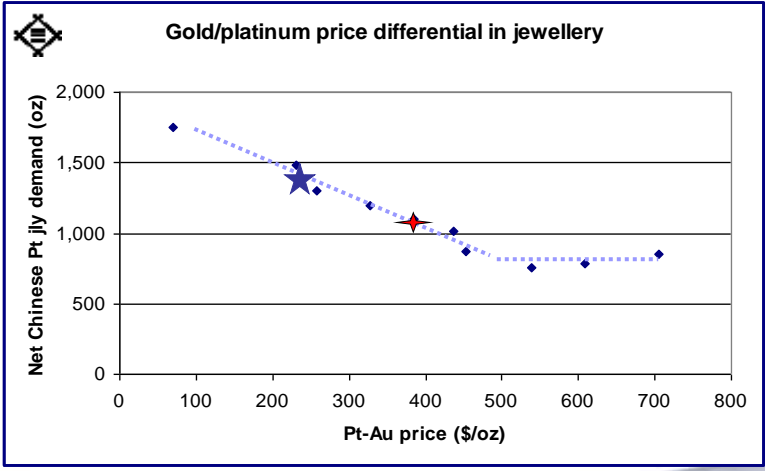


Source: Chinese Trade Statistics

28



Jewellery: impact of gold prices



Source: LBMA, LPPM, Johnson Matthey, Mitsui



Session 5: China & India – The Evolution of Golden Giants

Chairman: Albert Cheng
Managing Director, Far East, World Gold Council

China and India – The Evolution of Golden Giants



- China
 - 360 tonne shortfall in 2010 compensated by imports and recycled gold
 - Constrained domestic mining supply
 - Rising consumer wealth met by rapid retail expansion for gold
- India
 - Robust economic growth
 - Strong consumer affinity to gold
 - Explosion of middle class



31

China gold market overview



China gold demand and supply

Tonnes



- Rising consumer wealth; strong cultural affinity to gold
- Rapid retail expansion for gold
 - commercial banks have become an important channel
- Domestic inflationary concerns
- Risk of prolonged and sustained de-valuation of the US dollar
- Increasing uncertainty in the domestic stock and real estate markets
- Constrained domestic mining supply

Source: GFMS, WGC



32

Increasing Chinese Consumerism and Propensity to Save



Wai-Chan Chan, Director, Partner, OC&C Greater China

- Increase in spending on gold jewellery on the back of
 - Overall increase in willingness to spend
 - Better product offering
 - Investment function, particularly against inflation
- But savings rate remains high – traditional culture of saving and lack of social security
- Gold investment driven by
 - Lack of options
 - Cultural preference – represents “eternity”
 - Store of value – can be passed on to the next generation
 - Introduction of gold investment products has improved accessibility

33

Commercial Banking Business in China Gold Market



Zhao Wenjian, Deputy General Manager, ICBC Precious Metal Department

Major Services of Commercial Banks

- Producing and Financing
 - Leasing, collateral
- Retailing
 - Physical products
- Trading
 - Brokerage – provide investors access to the SGE, the most active physical gold market in China
 - Prop Trading

Looking Ahead

- Positive outlook amid increasing gold demand and active participation of financial institutions
- But will have to overcome the challenge of immature risk management and financial service ability

34

The Great Indian Opportunity

Rujan Panjwani, President, Edelwiess Financial Services Limited



- Traditional Demand Drivers
 - Cultural affinity
 - Security – only 40% of Indians have access to banking facilities
- Macroeconomic Demand Drivers
 - Expansion of per capita GDP
 - High savings rate – estimated 7% of India's total household savings is held in gold
 - Emerging investment asset - ETFs

35



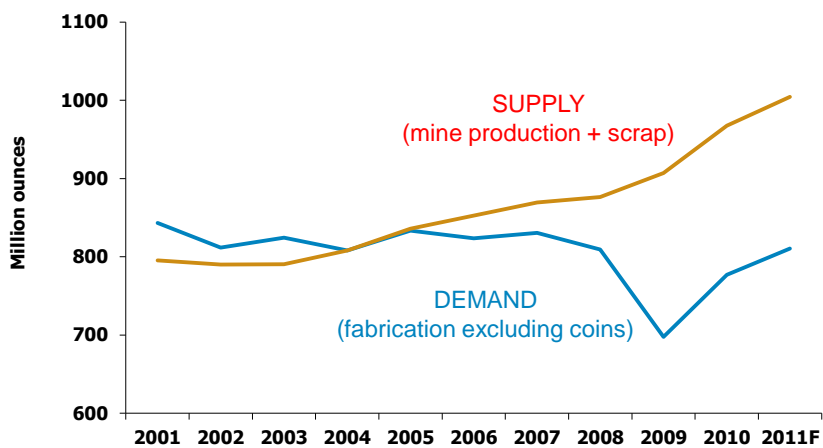
Session 6: Silver Session – No Longer the Poor Man's Gold?

Chairman: Michael DiRienzo
Executive Director, Silver Institute

36

Silver Investment, Philip Newman, Research Director, Thomson Reuters GFMS

-----A MIXED MESSAGE FROM SILVER'S SUPPLY/DEMAND FUNDAMENTALS



Source: Thomson Reuters GFMS

Silver – Bullish...ish



- Pre-May 2011, silver was seen as the rich man's strategy, given the: narrow gold-silver ratio; a smaller market offering more upside price potential; firmer market fundamentals (against gold); sovereign debt crisis, rising inflationary concerns; historically low interest rates. Large rise in allocated metal accounts and small bar & coin demand; US dollar commitment very high at this time.
- Post May 2011, investor reticence but now starting to re-appear, albeit more cautiously. With gold forecast to exceed \$2,000, the rich man's strategy is still broadly in place as silver is being taken seriously as a hard asset. Although a double-dip recession will impact fabrication, the decline will not be as acute as in 2009, so silver prices will to some extent be insulated. Overall, price expectations now less robust but we will see growing investor commitments.

38

Coins and Bars: Demand or Supply?

Terry Hanlon, President, Dillon Gage Metals



- Three Pillars of Silver Demand
 - Industrial Applications
 - Jewellery and Silverware
 - Investment Bars and Coins
- Dynamics of Investment Demand
 - US physical silver investment dominated by 1oz coins and 100oz bars
 - Coin market dominated by US Mint 1oz Silver Eagle
 - Supply sluggish compared to demand

39

Silver Usage in the Photovoltaic Business: Electrifying Demand?

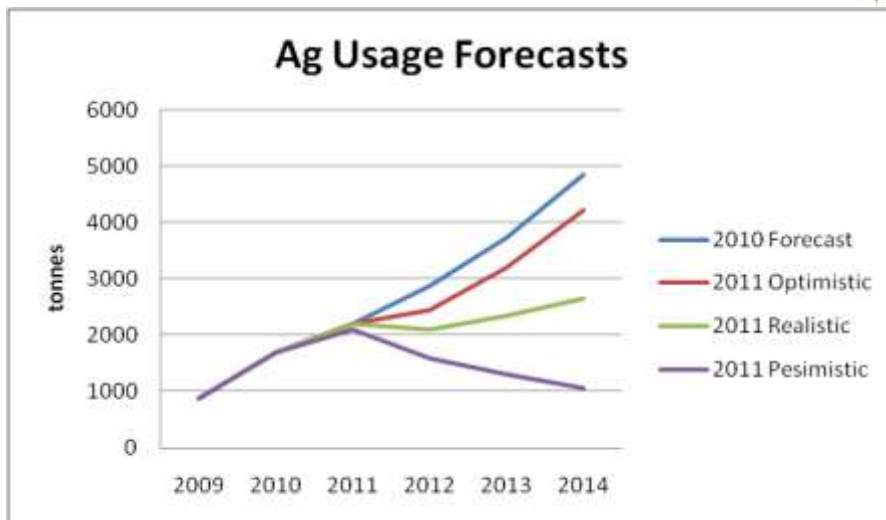
Andy London, Global Manager, Photovoltaic Business Unit
Heraeus Materials Technology LLP



- Silver is the metal of choice
 - Directly contacts Si without poisoning the junction
 - Best conductivity
 - Best solderability
 - High reliability
- But is under pressure due to aggressive price rally
 - Base case: reduces 2014 consumption forecast (grap/Wp) by 33%
 - Metal usage per watt will drop – unless price collapses
- US and China to outpace Germany as top installer soon

40

New Silver Usage Forecast



Page 4

Policy in Major European PV Markets



Country	2010 – 2012 Growth	Comments
Germany	↓	Subsidy reductions in 2011 and 2012. Est. 3-5 GWp/yr to 2020.
Italy	↔	Reduction in FiT rates every 4 months in 2011, but still generous rates. Target 3.3 GWp to 2013.
Czech Republic	↓	Reducing FIT rates and terminating subsidies for medium- and large- size systems. Proposed 4.5.MWp annual cap on new systems.
France	↑	Strong proponent of Nuclear Power. Surpassed 2010 PV Goal. Formulating plans to limit growth. 1 GWp growth in 2011 and 2012.
Spain	↓	Government plans to reduce solar power subsidies in order to help move Country out of the red.

In 2011, with the exception of Italy, the major European PV markets are facing recessions following significant downward adjustments of their solar subsidies.

Source: Digitimes Research: Special report, 2011 Global PV market.2011, May 18, 2011

Page 4

Policy in Other Major PV Markets



Country	2010 –2012 Growth	Comments
Japan	↑	Reduction in subsidies to manage growth. Expected demand in 2011 to grow to 1.6GWp and double to 3.2GWp in 2012.
China	↑	No single uniform subsidy program. Incentives have generated growth. Installation Forecast: 1GWp in 2011; 5GWp by 2015; 20GWp by 2020.
India	↑	Government has the following Solar Targets. Phase 1: 1.3GWp by 3/2013; Phase 2: 5GWp by 3/2015; Phase 3: 22GWp by 2022
Australia	↑	Government to use 3 incentive programs to increase renewable energy from 8% to 20% of its energy portfolio by 2020. Growth from 0.2GWp in 2010 to 1.0GWp in 2012 is expected.
United States	↑	Numerous and complex subsidy programs. But incentive for large power plants will increase demand from 1GWp in 2011 to 2GWp in 2012.

PV markets of India, the US, Canada, Australia and other countries have a great deal of growth momentum/potential to offset weakening.

Source: Digitimes Research: Special report, 2011 Global PV market.2011, May 18, 2011

Page 43



Session 7: Threats, Myths and Opportunities – the Grand Debate

Chairman: Tim Wilson
Managing Director, JPMorgan

Panel: Grant Angwin, Business Manager, Johnson Matthey
Raymond Key, Managing Director, Deutsche Bank
Jon Spall, Product Manager, Precious Metals, Barclays Capital
Trevor Raymond, Head Market Relations, Anglo Platinum Ltf

44