



# PALADIN ENERGY LTD

ACN 061 681 098

Ref: 198757

21 January 2011

Company Announcements Office  
Australian Securities Exchange  
20 Bridge Street  
SYDNEY NSW 2000

By Electronic Lodgement

Dear Sir/Madam

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING – 31 DECEMBER 2010

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### HIGHLIGHTS

- **Achieved record quarterly production results on both operating sites.**
    - **LHM 932,731lb up 4% on previous quarter**
    - **KM 534,201lb up 15% on previous quarter**
  - **LHM achieves 1 year zero LTI's and KM 5 month LTI free end Dec 2010.**
  - **Slower KM ramp-up will result in overall guidance downgrade from 7Mlb to between 6.0Mlb - 6.3Mlb for FY11.**
  - **Expansions:**
    - **Stage 3 LHM delayed. Commissioning to start late March quarter**
    - **Stage 4 LHM Feasibility Study underway with completion expected late September quarter**
  - **Sale of 1,273,922lb U<sub>3</sub>O<sub>8</sub> at an average realised price of US\$52/lb (previous quarter US\$46.50/lb).**
  - **Acquisition of the Aurora uranium assets in Canada adds significant project to Paladin pipeline.**
  - **Odin adds an Inferred Mineral Resource of 10.3Mlb U<sub>3</sub>O<sub>8</sub> at 0.06% to the Mount Isa Projects inventory.**
  - **Corporate:**
    - **US\$300M successfully raised via 5 year Convertible Bond expiring Nov 2015**
    - **Existing US\$250M Convertible Bond expiring Dec 2011 successfully bought back**
    - **Completion of takeover of NGM Resources**
  - **Spot uranium price continues to strongly increase with Ux quoting US\$68/lb mid January.**
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## SAFETY

Safety throughout the Group continues to improve with no Lost Time Injuries (LTIs) recorded for the quarter at its Langer Heinrich Mine (LHM) or Kayelekera Mine (KM). During the period at LHM, an external safety, health and environment audit by NOSA was conducted with the preliminary result being that the site continues the 4 Star Platinum rating with an improved overall performance. Implementation of the NOSA safety system at Kayelekera in preparation for a similar external safety, health and environmental audit in the June quarter is underway.

## QUARTERLY URANIUM SALES

Sales for the quarter were 1,273,922lb U<sub>3</sub>O<sub>8</sub> generating revenue of US\$66.3M, representing an average sales price of US\$52.00/lb U<sub>3</sub>O<sub>8</sub> (average Ux spot price for the quarter was US\$56.71/lb U<sub>3</sub>O<sub>8</sub>).

The Ux spot price increased from US\$46.50/lb U<sub>3</sub>O<sub>8</sub> at the end of September to US\$62.50/lb U<sub>3</sub>O<sub>8</sub> at the end of December. The Ux long term price indicator rose from US\$60/lb U<sub>3</sub>O<sub>8</sub> to US\$65/lb U<sub>3</sub>O<sub>8</sub> during the quarter.

## GLOBAL PRODUCTION FOR 2010

The overall production for calendar year 2010 of 5,429,863lb has increased 74% from the previous year's production as shown in the table below.

	LHM	KM	Total Paladin
<b>Production lb 2010</b>	<b>3,688,203</b>	<b>1,741,660</b>	<b>5,429,863</b>
<b>Production lb 2009</b>	2,875,496	253,616	3,129,112

Progressive quarter by quarter production of the combined operations is as follows:-

LHM + KM	Mar qtr	June qtr	Sept qtr	Dec qtr
<b>Production lb U<sub>3</sub>O<sub>8</sub></b>	1,157,375	1,442,842	1,362,713	<b>1,466,932</b>

## LANGER HEINRICH MINE (LHM), Namibia

### Production

LHM	Mar qtr	June qtr	Sept qtr	Dec qtr
<b>Production lb U<sub>3</sub>O<sub>8</sub></b>	928,370	927,373	899,735	<b>932,731</b>

Langer Heinrich continues to operate at nameplate capacity and in the December quarter delivered record production.

### Mining

Mining activities have been advanced prior to Stage 3 initiation, with three working areas expected to supply ore feed in 2011. Mining and plant ore feed month by month over the half year to December 2010 were as follows:-

	July	Aug	Sept	Oct	Nov	Dec
<b>Ore mined (t)</b>	116,706	363,344	746,818	408,185	154,824	34,594
<b>Grade (ppm)</b>	744	930	864	790	690	593
<b>Additional low grade ore mined (t)</b>	52,291	38,648	132,256	116,270	59,424	41,602
<b>Grade (ppm)</b>	286	327	344	337	351	307
<b>Waste/Ore ratio</b>	5.9	2.4	0.59	1.77	6.62	33.01

	July	Aug	Sept	Oct	Nov	Dec
Ore crushed, dt	182,072	179,714	186,080	173,100	187,900	214,800
Ore grade, ppm U <sub>3</sub> O <sub>8</sub>	994	881	1048	1036	915	844

Mining operations were carried out as planned, with large month to month variations in ore vs waste, as additional areas were prepared for mining in 2011. A high percentage of the waste material is being utilised for the new in-pit tailings facility which is expected to be operational in the June quarter. This waste was intentionally mined in December resulting in a high strip ratio for that month and will normalise back to historic levels going forward.

### Process Plant

Tonnage through the process plant was the highest ever at over 575,000 dt crushed beating the previous quarterly record of 550,000 dt.

Performance of the front end circuits is satisfactory. The Stage 3 expansion features a much larger and robust scrubber as well as various circuit up-grades that will improve performance.

The leaching circuit extraction rate increased to 92% for the December quarter with an average of 94.2% in December. Leaching circuit vessels are now completely insulated and cost reductions as a result of this programme are currently being evaluated. The Stage 3 expansion includes a new system of slurry heating which has been designed around the results of a year long site based pilot plant trial. This new system will reduce operational dependence on the current spiral heat exchangers.

Counter-Current Decantation (CCD) and Ion Exchange (IX) combined operationally to a wash efficiency of 73.3%. Performance in this area is under review as an increase in efficiencies will provide an excellent opportunity to improve production and reduce costs.

The precipitation and drying areas are working above capacity and have the capability to perform well above nameplate. This was particularly evident in December when the product thickener was cleaned out for maintenance resulting in much higher than normal packaging levels.

### Stage 3

Construction continued through the December quarter and is expected to be completed in the March quarter, allowing production commissioning and ramp-up to proceed.

The Stage 3 expansion project at LHM, which is increasing the existing plant's throughput to 5.2Mlb pa, is now 85% complete and is progressing well.

The project is now scheduled for mechanical completion late in the March quarter. This is delayed from the original schedule that anticipated completion by January 2011. Critical path equipment, including boilers and IX columns, were delayed arriving at site and as such have pushed back expected mechanical completion by approximately 2 months.

The budget is expected to be contained within 25% of the approved budget forecast; this includes recent foreign exchange movements.

### Stage 4

A Bankable Feasibility Study has been initiated following the updated Resource and Reserve statements provided in the last quarterly report for the expansion of LHM to 10Mlb U<sub>3</sub>O<sub>8</sub> pa. The study is investigating a new plant to be located adjacent to the existing plant with total production capacity of around 8.7Mlb U<sub>3</sub>O<sub>8</sub> pa. In addition, the potential for heap leaching or upgrading the below cut-off grade material/mineralised waste rock to recover a further 1.3Mlb U<sub>3</sub>O<sub>8</sub> pa is also being investigated. This feasibility study is scheduled for completion by the last quarter of CY2011.

**KAYELEKERA MINE (KM), Malawi****Production**

<b>KM</b>	<b>Dec 09 qtr</b>	<b>March qtr</b>	<b>June qtr</b>	<b>Sept qtr</b>	<b>Dec 10 qtr</b>
<b>Production lb U<sub>3</sub>O<sub>8</sub></b>	145,315	228,996	515,478	462,977	<b>534,201</b>

Although a record level of production occurred at Kayelekera, performance during the quarter was hampered by intermittent electrical power generation outages resulting from earlier than scheduled mechanical overhauls of the on-site diesel power plants. The impact of these outages was reduced as 3 redundant diesel generators with an overall capacity of approx 2.8MW were relocated from Langer Heinrich and were installed mid-December. The reliability of the main Hyundai power plant had been impacted by the logistics chain to Malawi, however is now functioning well.

During times of consistent power operation the plant did operate at or near design levels. This is expected to improve with increased operational efficiencies and plant utilisation. Overall recovery levels have improved significantly contributing to higher production levels.

**Mining**

The mining and plant ore feed month by month for the half year ending December 2010 were as follows:

	<b>July</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>Ore mined (t)</b>	105,108	132,720	82,054	140,572	43,000	44,786
<b>Grade (ppm)</b>	1906	1555	2111	1865	1003	1504

<b>Additional low grade ore mined (t)</b>	39,680	33,473	49,073	13,448	56,905	17,144
<b>Grade (ppm)</b>	513	509	515	546	513	491

<b>Waste/Ore ratio</b>	1.2	1.75	2.3	1.2	3.0	2.8
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**Operating data – Process**

Clearly evident from the data below, the plant when operating, is running at design levels. For instance, on a strictly ratio basis, the plant running at 2000 hrs per quarter (of 2200 hrs available) would produce at 95% of nameplate. Solutions to improving the running times have been identified and implemented mainly involving process/maintenance operations with emphasis on the logistics chain. Further work is underway to achieve a consistent 2000 hours quarterly run time.

	<b>Dec qtr</b>
<b>Operating time hrs</b>	1380
<b>Mill feed, dry tonnes</b>	228,764
<b>Grade (ppm)</b>	1439
<b>Leach extraction %</b>	90.1
<b>RIP efficiency %</b>	88.4
<b>Overall efficiency %</b>	78.0

**Process Plant**

The crushing and grinding circuits have shown that they are capable of routine operation for both wet and dry conditions.

Leaching extraction is operating at over 90% versus 91% design. A modification to the launder system, when complete, is expected to improve extraction to at least design. Acid production on-site continues to run as per demand.

Resin-in-Pulp operational issues are being systematically mitigated, with efficiencies currently at 88.4% and regularly well over 90% for extended periods. Further increases in RIP efficiency continue as improved resin management and preventative maintenance processes are established.

The back end of the plant (uranium precipitation and packaging) is operating at nameplate.

## Lender's Test

The 90 day continuous testing of 10 specific operational parameters, including tonnage throughput, grade reconciliation to resource model, overall recovery, production targets and unit costs, began on 1 November. Power disruption has extended the test period, however the operation continues with the testing and Paladin is confident it will be successfully completed within the required timeframe.

## Expansion Study

Paladin's operational development team has formally embarked on design of the plant expansion to 3.8Mlb pa. As has been the case with expansions at Langer Heinrich, data derived from current Kayelekera operations will be valuable to reliably provide design and construction methods which, when initiated, will raise production capacity to stated levels and provide enhanced operation ability. This study is expected to be completed within the next 6 months.

## GUIDANCE STATUS

Despite increased efficiencies and record production at Kayelekera, ramp-up delays in the first half of the year at the operation due to abnormal down-time resulting from power and maintenance disruptions have impacted FY11 production expectations. As a result production guidance for FY11 is reduced to a range of 6.0Mlb to 6.3Mlb versus the 7Mlb currently forecast. Management is confident that this conservative revision will be met and installed capacity will be maintained going forward as operational efficiencies and plant availability are improving.

## MOUNT ISA REGION PROJECTS, Queensland

Work in the quarter included a maiden Mineral Resource estimate for the Odin orebody. The resource drilling programme at the Bikini deposit was completed in late December and the Skal programme is expected to be completed following the resumption of drilling in late March 2011.

## MOUNT ISA URANIUM JOINT VENTURE (Paladin Energy Ltd 50%, Summit Resources (Aust) Pty Ltd 50% Operator)

### Odin Uranium Deposit

The Odin deposit is part of the Valhalla Project and is located 40km north of Mount Isa on EPL 17514.

The maiden Mineral Resource estimate is based on 99 holes totalling 16,044m. The Odin deposit now has a strike length of 600m and contains two mineralised lenses. The main lens trends north-north-east and dips 50° - 60° to the east. The smaller southern lens strikes north-south and dips steeply to the east. Following compilation and consolidation of all data into a resource dataset, an initial Mineral Resource estimate has been completed. The Mineral Resource is currently classified as Inferred, primarily due to drill spacing and the number of bulk density determinations within the dataset. Additional drilling is expected to be undertaken in 2011, after the wet season, following on from the drilling at Skal with an updated Mineral Resource estimate expected June quarter.

The initial Inferred Mineral Resource estimate for the Odin uranium deposit is quoted using a cut-off grade of 250ppm U<sub>3</sub>O<sub>8</sub>.

	Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	t U <sub>3</sub> O <sub>8</sub>	Mlb U <sub>3</sub> O <sub>8</sub>
<b>Inferred Resources</b>	8.2	573	4,685	10.3

*(Mineral Resource quoted on 100% basis)*

The Mineral Resource estimation was completed using the same methodology (Multi Indicator Kriging) as that undertaken at Valhalla, with the dataset derived predominantly from downhole radiometric logging using company owned, calibrated equipment. The radiometric grades have also been extensively validated against laboratory assays.

## Skal Uranium Deposit

At Skal a resource development drilling programme of 28 holes totalling 4,566m was halted in early December due to the wet season. Encouraging results so far include:

SD0129            from 50m to 91m down hole, totalling 41m at 838ppm U<sub>3</sub>O<sub>8</sub>  
SR0138            from 165m to 215m downhole totalling 50m at 1,394ppm U<sub>3</sub>O<sub>8</sub>

A resource upgrade for Skal is expected late in the March quarter following completion of the drilling programme.

## Bikini Uranium Deposit

A 40m x 40m infill resource drilling programme was completed at Bikini in late October 2010. Drilling included 66 holes totalling 10,527m. An updated resource is expected to be completed in the first quarter of 2011 following compilation and validation of all the data.

## CORPORATE

### Acquisition of Aurora Uranium Assets

Paladin announced in December 2010 that it had initiated its uranium business in Canada and entered into a Definitive Agreement for the purchase of the uranium assets of Aurora Energy Resources Inc. ("Aurora") a wholly owned subsidiary of Fronteer Gold (TSX-FRG, AMEX-FRG) ("Fronteer"). Aurora Energy holds title to significant uranium assets within the highly prospective Central Mineral Belt ("CMB") of Newfoundland and Labrador in Eastern Canada, including the Michelin deposit (67.12Mlb Measured and Indicated and 36.08Mlb Inferred Resources of U<sub>3</sub>O<sub>8</sub>) as well as the Jacques Lake, Rainbow, Nash, Inda and Gear deposits and has secured the most prospective ground within the CMB.

NI 43-101 compliant U<sub>3</sub>O<sub>8</sub> resources have been defined across all the deposits as follows:-

- 83.8Mlb U<sub>3</sub>O<sub>8</sub> Measured and Indicated Mineral Resources (40.2Mt ore at 0.09%)
- 53.0Mlb U<sub>3</sub>O<sub>8</sub> Inferred Mineral Resources (29.0Mt ore at 0.08%)

The consideration for 100% ownership amounted to C\$260.87M via the issuance of 52,097,937 shares in Paladin. This valued the current resources at US\$1.90/lb.

Paladin considers the CMB to be one of the few remaining, underexplored uranium districts globally and this acquisition not only provides Paladin with a noteworthy mid-term development asset but also offers an excellent opportunity for both significant new discoveries and expansions of the existing deposits. This highly strategic transaction fulfils Paladin's long held ambition to expand its footprint into Canada, a leading country in uranium mining, both in terms of resources and its stable political and business environment, providing the Company with an important new platform from which to plan its continued growth.

With this acquisition, Paladin's global uranium portfolio increases appreciably and, with strong potential for additional uranium resource discovery to complement the existing resource base, provides a genuine development opportunity within the forthcoming decade.

### Convertible Bond Issue

During this reporting period Paladin announced the successful issue of senior, unsecured convertible bonds due October 2015 (Convertible Bonds).

The Convertible Bonds carry a coupon of 3.62% pa and are convertible into Paladin shares at an initial conversion price of US\$5.665 per share and represented a conversion premium of approximately 32.5% above the reference price of Paladin shares at the time of pricing.

The proceeds of the issue were used to fund Paladin's tender offer to acquire from eligible bondholders its US\$250M issue of convertible bonds due in December 2011, with any amount not applied to the tender offer being utilised to fund in part the proposed expansion of the Langer Heinrich Mine and to pursue future growth opportunities. The tender offer was fully accepted.

## NGM Resources Ltd Takeover

On 10 December 2010 Paladin completed its takeover following compulsory acquisition of the remaining shares. The total number of shares allotted in relation to the acquisition of NGM was 7,116,001 fully paid shares.

## Corporate Development Manager

Justin Reid, General Manager Corporate Development for Paladin has tendered his resignation effective 1<sup>st</sup> February 2011. Justin will be returning to Canada with his family and rejoining the capital markets. Justin is thanked for his contributions to the Company during what has been an exciting period of growth.

Paladin is pleased to announce the appointment of Dr. Nicole Adshead-Bell, in the role of Manager Corporate Development effective 1<sup>st</sup> February 2011. Nicole has a Ph.D. in Geology from James Cook University, Queensland and worked as a buy and sell side analyst specialising in both uranium and precious metals. Most recently Nicole was a Managing Director, Investment Banking for Haywood Securities Inc., in Vancouver focused on M&A in the mining and exploration sector. Nicole will be based in Vancouver, Canada and supported in Perth by both an analytical and IR team.

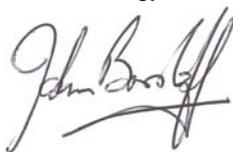
## Uranium Market Comments

At the beginning of 2010 the uranium market was considered by some - but not Paladin - to be possibly over-supplied and lacking in direction despite the strong growth in new reactor commitments in China, India, Korea and the UAE and re-affirmation of successful nuclear power programmes in Europe and the United States.

The Ux spot price was US\$43.50/lb U<sub>3</sub>O<sub>8</sub> in January and the Ux long term price was declining from US\$62/lb U<sub>3</sub>O<sub>8</sub> towards US\$58/lb U<sub>3</sub>O<sub>8</sub> in March. By the end of 2010 a different picture has emerged. Reported spot volumes of over 50Mlb U<sub>3</sub>O<sub>8</sub> (equivalent) almost matched the record set in 2009, and reported long term contracting volumes of over 240Mlb U<sub>3</sub>O<sub>8</sub> (equivalent) approached the record of 250Mlb U<sub>3</sub>O<sub>8</sub> (equivalent) set in 2005 (when the average annual long term price was US\$30.73/lb U<sub>3</sub>O<sub>8</sub>). Reflecting these trends the Ux spot price recovered to US\$62.50/lb U<sub>3</sub>O<sub>8</sub> in December 2010 (and subsequently rose to US\$68/lb U<sub>3</sub>O<sub>8</sub> in mid-January 2011) and the Ux long term price also began moving upwards. On the production side it seems that the recent year-on-year increase in uranium production has slowed. Preliminary figures indicate global production rose by 8% in 2010, less than half the increase between 2008 and 2009, and that Kazakhstan accounted for more than 75% of the increased output.

Like other commodities, uranium is now showing signs of price recalibration as industry participants re-focus on medium and long term supply and demand issues. Paladin is exquisitely placed to provide new supply into this exciting and growing market.

Yours faithfully  
Paladin Energy Ltd



**JOHN BORSHOFF**  
Managing Director/CEO

### Declaration

*The information in this announcement that relates to mineral resources is based on information compiled by David Princep BSc MAusIMM for Mineral Resources. Mr Princep has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", and as a Qualified Person as defined in Canadian National Instrument 43-101. Mr Princep is full-time employees of Paladin Energy Ltd and consents to the inclusion of the information in this announcement in the form and context in which it appears.*