## 7 January 2021

**ASX RELEASE** 

# LPI to Recommence Exploration Activity Adjacent to the Greenbushes Lithium Mine

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Lithium Power International Limited (ASX: LPI) (LPI or the Company) is pleased to provide an update on its exploration strategy in Western Australia, focused on the company's Greenbushes project in the south-west of the state. The project is wholly-owned by LPI and is located adjacent to the world's highest grade spodumene lithium mine.

# HIGHLIGHTS

- The 100 per cent-owned Greenbushes tenements cover 39,800 ha north and south of the Greenbushes mine owned and operated by major lithium producers Albemarle and Tianqi.
- The northern tenement is immediately adjacent to the Greenbushes mine and has been the focus of most exploration activity by LPI in late 2019 and early 2020.
- Exploration defined the 3 by 1 km Balingup East Target as a continuation of the large arsenic lithium halo around the nearby giant Greenbushes lithium mine. 201 Surface samples were taken over 60 km<sup>2</sup>, with further sampling planned to define drill targets.
- LPI identified further drill targets in the East Kirup area to the north of Balingup, over 3 by 0.5 km, with pegmatite outcrop in the prospective amphibolite unit.
- LPI has received drilling approval and will be conducting additional geochemical sampling before drilling commences.

# Project Background

LPI wishes to update shareholders regarding the reactivation of the company's Western Australian exploration projects. They have been on hold during most of 2020 due to Covid restrictions and low lithium prices. We are now seeing substantial improvement in current and forecast demand for lithium, with prices forecast to increase during 2021 and beyond. LPI is, therefore, recommencing exploration in Western Australia with the primary focus on the Greenbushes project in the State's south-west.

As a reminder of the pedigree of the world class Greenbushes lithium mine, we note the announcement on 9 December 2020 by IGO Limited (previously Independence Group) regarding a US\$1.4bn acquisition of a 24.99 per cent indirect interest from lithium major Tianqi at the adjacent Greenbushes mine, plus a 49 per cent interest in the associated lithium hydroxide plant being constructed in Kwinana, south of Perth. This major acquisition highlights the scale of the Greenbushes mine and the attractiveness of WA lithium projects to supply battery materials. Lithium demand is accelerating as countries set time frames to phase out internal combustion engines in favour of EVs. Impetus is also being provided by the increasing usage of lithium batteries as grid electricity storage becomes an integral part of renewable energy systems.

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The Greenbushes tenements extend over 398 km<sup>2</sup> in the South West of WA are located in the vicinity of international port facilities and in close proximity to an experienced workforce, electricity infrastructure, paved roads and potential water supplies.

### **Planned Activities**

The Greenbushes project consists of two tenements, the northern tenement (Balingup) covers 315 km<sup>2</sup> directly adjacent to the Greenbushes mine block owned by Albemarle and Tanqui. The southern tenement (Brockman) covers 83 km<sup>2</sup> located further south along a continuation of the Greenbushes mine stratigraphy. The tenements have an approved program of works (2020) and an environmental management plan for activities in State Forest areas.

The Greenbushes mine is the centre of a 20 km by 12 km zone of elevated laterite geochemistry around pegmatites in the mine trend, identified in published studies. Elements with elevated values in laterite around the Greenbushes mine include arsenic, tin, tantalum, antimony, lithium, boron and beryllium. Studies of the distribution of arsenic in soils suggest this is a particularly significant indicator element.

Previous exploration activities by LPI during 2019 included an extensive laterite sampling campaign and surface mapping over the Balingup tenement, with samples taken at 300 m centres along eastwest lines separated by between 1 and 2 km in a north to south direction. Sampling identified additional zones with significantly elevated geochemistry (Figure 1). Of particular interest is the Balingup East target within the LPI tenement, with strongly elevated arsenic in laterite (to >500 ppm) along the Donnybrook-Bridgetown (DB) Shear Zone. *This strong arsenic geochemistry identified by LPI defines a northern extension of the strong arsenic geochemistry identified by historical laterite geochemistry on the Greenbushes mine site* (*Smith, et. al., 1987, Journal of Geochemical Exploration, 29, p251-265).* LPI has also mapped pegmatites outcropping in this area.

More detailed laterite sampling and additional mapping is planned for the areas with elevated geochemistry, prior to undertaking drilling.

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# Lithium Power International's Chief Executive Officer, Cristobal Garcia-Huidobro, commented:

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"With the increased market interest in lithium, we feel it is opportune to re-start our WA exploration activities. The recent move by IGO Limited to acquire a portion of the Greenbushes mine adjacent to our project reiterates the significant value of high-grade lithium pegmatites and the Greenbushes project in particular, in a secure global jurisdiction. We look forward to updating shareholders on our exploration activities as they advance to drilling."

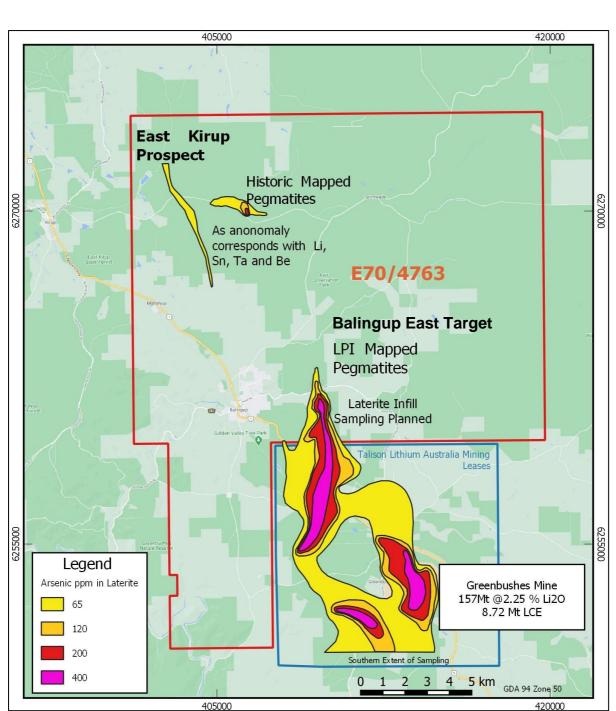
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### For further information, please contact:

### Cristobal Garcia-Huidobro – CEO; or Andrew Phillips – CFO

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**Figure 1** - Greenbushes project Balingup tenement, showing elevated arsenic detected from LPI sampling combined with public information from the Greenbushes mine tenement – values > the coloured threshold numbers (Smith et. al., 1987)

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### **Competent Person's Statement – GREENBUSHES PROJECT**

The information contained in this ASX release relating to Exploration Targets, Exploration Results and resources has been compiled by Mr Murray Brooker. Mr Brooker is a Geologist and Hydrogeologist and is a Member of the Australian Institute of Geoscientists (AIG) and the International Association of Hydrogeologists (IAH). Mr Brooker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a "Qualified Person" as defined by Canadian Securities Administrators' National Instrument 43-101.

Mr Brooker is an employee of Hydrominex Geoscience Pty Ltd and an independent consultant to Lithium Power International. Mr Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from the Greenbushes project.

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### APPENDIX 1 - JORC Code, 2012 Edition - Table 1 Report: Greenbushes Project

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Laterite samples were taken from ferruginous material loose at surface or in ferruginous layers.</li> <li>Where laterite material was not available pits were excavated to the C horizon and soils samples were taken and recorded separately from the laterite samples.</li> <li>Sampling was undertaken on east-west sample lines, with samples taken every 300 m metres.</li> <li>Samples were collected as composites over areas of approximately 5 x 5 metres, to ensure sample representativity of the sample site.</li> <li>Much of the tenement has lateritic cover or dissected laterite cover. Samples of this material were taken in preference to soil samples, where possible.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Drilling has not yet been carried out on the tenements by LPI. The work undertaken consists of laterite and soil sampling to target drilling.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Drilling has not yet been undertaken on the tenements by LPI.</li> </ul>
Geologic Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Samples were geologically described and photographed when taken, to compare sample material across the tenement and for future reference.</li> </ul>

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Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No sub-sampling was undertaken. Samples were collected in plastic bags and sent to the laboratory for crushing and analysis.</li> <li>Material was ferruginous and iron cemented and is considered appropriate for a laterite sampling campaign.</li> <li>Sample crushing and pulverisation in the laboratory is considered to be appropriate, with pulps of samples retained.</li> <li>No standards were included in this early-stage program. Laboratory duplicates were analysed every 20 primary samples. Follow up sampling will utilize standards and laboratory duplicates.</li> <li>Sample sizes are considered appropriate for the grain size and chemical cementation of the samples</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and the derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The samples were analysed at the Nagrom laboratory in Perth. The laboratory is well established and the ICP methodology is considered appropriate for analysis of the broad suite of elements analysed.</li> <li>It is noted that the original investigation on the Greenbushes mine property by Smith et. al., (1987, Journal of Geochemical Exploration, 28, p251-265) used AA for analysis of samples, so there may be a systematic difference with equivalent samples analysed with ICP equipment.</li> <li>Assays are from total acid digestions.</li> <li>Laboratory duplicates were analysed every 20 samples. This is considered appropriate for the exploration undertaken. Standards will be also be used in future sampling campaigns.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Samples were described and photographed in the field and reviewed together by company personnel prior to submission to the laboratory.</li> <li>Planned sampling will be undertaken to verify these results and collect infill samples to better define the area of elevated geochemistry.</li> <li>Spreadsheet data from the laboratory was imported directly to the database.</li> <li>Sample pulps were retained for future re-assay if required.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The sample sites were located with a hand-held GPS in the field to +/- 5 m</li> <li>The location is in GDA94 Zone 50.</li> </ul>

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Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Samples were collected with a spacing of 300 m on east-west lines</li> <li>Additional sampling will be undertaken to follow up elevated geochemistry</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The samples were taken at surface. The bedrock is expected to be strongly folded and faulted.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were stored in a locked shed following collection in the field. Samples were then transported to the company office in Perth and reviewed, before being delivered directly to the laboratory.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted at this point in time.

### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>LPI owns 100% of tenement E70/4763 and E70/4774. The tenements are located in Balingup and Bridgetown area of SW Western Australia. The properties cover areas of state forest, where LPI is concentrating exploration efforts.</li> <li>The tenements are fully granted to LPI.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The interpretation of results draws on previous academic studies (Smith et. Al, 1987) of the Greenbushes Mine, which concluded it has an extensive geochemical signature, include a prominent arsenic halo.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The target mineralisation is lithium associated with pegmatites emplaced into amphibolite units along the Donnybrook Bridgetown shear zone.</li> <li>The Greenbushes mine (owned by Albemarle and Tianqui) is located in this setting and is the world's largest high-grade lithium mine.</li> </ul>

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Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole ength.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>No drilling has been undertaken at the project by LPI yet. Work to date has consisted of geological mapping, rock, laterite and soil sampling and evaluation of historical data. The project has a current PoW for planned drilling activities.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Samples have been geochemically analysed separately. Results have been used as reported by the laboratory and not aggregated/combined.</li> <li>Samples were taken over areas of approximately 5 by 5 metres.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>No drilling has been conducted on the project to date by LPI.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• A map showing the area where elevated arsenic in samples has been detected is presented as Figure 1 in the text of this announcement. The results on the adjacent Greenbushes Mine tenement are from academic evaluation by Smith et. al., 1987.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• This announcement presents a summary of the elevated sampling results from the Greenbushes project. Samples have between 5 and 565 ppm As and 0 to 73 ppm Li.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk</li> </ul>	<ul> <li>Exploration at Greenbushes has involved geological mapping, rock, laterite and soils sampling and is at a relatively early stage.</li> </ul>



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Criteria	JORC Code explanation	Considerations for Mineral Hard Rock Projects
	density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The company will undertake follow up laterite sampling and sampling with a closer spacing, to define targets for geochemical drilling</li> </ul>