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**Innovativity To Productivity**

**PRODUCTIVE TECHNOLOGIES COMPANY LIMITED**

**普達特科技有限公司\***

*(Incorporated in Bermuda with limited liability)*

**(Stock Code: 650)**

## **UPDATE ON DEVELOPMENT OF EQUIPMENT FOR SEMICONDUCTOR AND SOLAR POWER**

This announcement is made by Productive Technologies Company Limited (the “**Company**”) on a voluntary basis to keep the shareholders and potential investors of the Company informed of the latest business development of the Company.

Reference is made to the announcement of the Company dated 10 August 2023 in relation to the development of the equipment for semiconductor and solar power (the “**Announcement**”). Unless the context requires otherwise, the capitalized terms contained herein will have the same meanings as those defined in the Announcement.

### **SIGNING OF PURCHASE ORDER OF INLINE COPPER ELECTROPLATING EQUIPMENT INCELLPLATE Cu SERIES**

The Board is pleased to announce that on 22 August 2023, the Company signed the purchase order with its customer of inline copper electroplating equipment, Incellplate Cu series (the “**Product**”). The revenue from the purchase order is yet to be recognized. To the best of the Directors’ knowledge, information, and belief, having made all reasonable inquiries, the customer and its ultimate beneficial owner are third parties independent of the Company and its connected persons as of the date of this announcement.

The copper electroplating technology, which can be applied in N-type solar cell technologies (i.e., TOPCon, HJT, and IBC), adopts base metal as interconnect material instead of precious metal silver for metallization, effectively reducing production costs. Compared with the conventional screen-printing technology, the copper electroplating technology is expected to achieve cost reduction of RMB0.02 per watt to RMB0.04 per watt.

The copper metallized electrode has a smaller metal wire resistance of  $1.7\Omega\cdot m$ , which provides greater conductivity. The thinner copper grid line produces relatively less optical loss. Moreover, the inner side of the copper metallized electrode is dense and well-distributed, which can effectively reduce the ohmic loss of the electrode. Accordingly, copper electroplating can increase battery conversion efficiency by 0.3% to 0.5% compared with the conventional technology.

Incellplate Cu series equipment, developed from the multi-functional inline electroplating process, adopts the horizontal inline electroplating method, one of three mainstream electroplating methods (i.e., vertical electroplating, horizontal inline electroplating, and insert electroplating), for its two salient advantages as follows:

- 1) The horizontal inline electroplating method features adaptation to a wide range of sizes, fully automatic operation, and thus a relatively high production capacity; and
- 2) During the horizontal inline electroplating process, the battery surface can be evenly immersed in the solution, which ensures an even electroplating layer and stable cell.

Incellplate Cu series equipment is compatible with different metal electroplating methods and diverse battery structure types, and provides stable and reliable current supply and distribution during the transmission of electric energy in a cell, creating an encapsulating process solution for equipment operation, material application, process design and waste liquid recycling.

The Product is a piece of metallization processing equipment applied to solar cell manufacturing. Based on principle of electrolysis, the Product adopts electrodeposition to coat one particular metal in a layer of metals or alloys, achieving electrode molding for solar cells.

## **GENERAL**

The transaction contemplated under the purchase order does not constitute a notifiable transaction of the Company under Chapter 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The Company will make further announcement(s) as and when appropriate if required.

**The shareholders and potential investors of the Company are advised to exercise caution when dealing in the securities of the Company.**

By Order of the Board  
**Productive Technologies Company Limited**  
**Liu Erzhuang**  
*Chairman and Chief Executive Officer*

Hong Kong, 22 August 2023

*As at the date hereof, the Board comprises seven Directors, of whom three are executive Directors, namely Dr. Liu Erzhuang (Chairman), Mr. Tan Jue and Mr. Liu Zhihai; one is non-executive Director, namely Mr. Cao Xiaohui; and three are independent non-executive Directors, namely Ms. Ge Aiji, Mr. Chau Shing Yim David, and Mr. Wang Guoping.*

\* For identification purposes only