IBCense

Publieke samenvatting / Public summary

Aanleiding

The annual growth of installed PV has led to dramatically decreased prices for modules and systems. For household applications, grid parity has been reached now. The next step is to become competitive to current conventional large-scale utility prices.

Doelstelling

It is the goal of the “IBCense” project consortium to bring the high-efficiency n-type IBC cell and module to a competitive cost level compared to the current standard, using Dutch equipment in the processing. This will maintain the strong position of Dutch OEM in the global PV market.

Korte omschrijving

The activities within the “IBCense” project are summarized below, and the tasks will be carried out by Levitech, Tempress, REC and ECN: 1 Industrially feasible and cost-effective process for p+ emitter on both front and rear side, using innovations for high-throughput boron diffusion 2 Improved properties of n+ BSF at the rear side, by introduction and development of well-tuned profiles obtained by phosphorus implantation 3 Novel passivation scheme designed for n+ and p+ doped Si 4 Reducing cost of the patterning step, by introduction of an inexpensive masking step compatible with the phosphorus implantation process 5 Reducing cost for metallization by introduction of innovative metal contact scheme for both polarities and improving cell performance by optimization of the metal grids 6 Assessment of wafer specifications, cost and industrial feasibility,

Projectinformatie / Project information

Projectnummer / Project number
TEZ0214004
Subsidiebedrag / Grant amount
€ 750.000,00

Algemene informatie / General information

Penvoerder / Secretariat
Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO

Publicaties en materialen / Publications and attachments

- **11.03.2019**

  Eindrapport IBCense 2017 (TEZ0214004)

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resulting in a process flow that is ready for industrial implementation at competing cost

Resultaat

The result of the “IBCense” project will be a cost-effective process while maintaining and improving high cell performance. The project consortium aims for a premium product with cell efficiency of 22-23% for industry-ready cells, and reduction of the cost of ownership for IBC cells and modules to competing PV standards.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.
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Voor meer informatie over de TSE / Energie-Innovatie regelingen die RVO aanbiedt, ga naar **www.rvo.nl/tse**.