# ‘Inkjet’ solar panels set to reshape green energy

Posted at: 04/02/2019

**Perovskites-coated cells are light, flexible and inexpensive**

- What if one day all buildings could be equipped with windows and facades that satisfy the structure’s every energy need, whether rain or shine?
- That sustainability dream is today one step closer to becoming a reality thanks to Polish physicist and businesswoman Olga Malinkiewicz.
- The 36-year-old has developed a novel inkjet processing method for perovskites — a new generation of cheaper solar cells — that makes it possible to produce solar panels under lower temperatures, thus sharply reducing costs.
- Solar panels coated with the mineral are light, flexible, efficient, inexpensive and come in varying hues and degrees of transparency.
- They can easily be fixed to almost any surface — be it laptop, car, drone, spacecraft or building — to produce electricity, including in the shade or indoors.
- Initially the process was complicated and required ultra high temperatures, so only materials that could withstand extreme heat — like glass — could be coated with perovskite cells.
- In 2013, while still a Ph.D student at the University of Valencia in Spain, Ms. Malinkiewicz figured out a way to coat flexible foil with perovskites using an evaporation method.
- Later, Olga Malinkiewicz developed an inkjet printing procedure that lowered production costs enough to make mass production economically feasible.

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