



**Category:** Renewable Energy

**Sub Category:** Third Generation Dye Solar Cell (DSC) PV Technology

[www.3gsolar.com](http://www.3gsolar.com)

## Company profile

**Date of establishment:** Dec 2003

**No. of employees:** 19

## Background on the company

3GSolar is developing third generation Dye Solar Cell (DSC) photovoltaic technology. The company is an acknowledged leader in the field making rapid progress towards commercialization. Our disruptive technology addresses an unlimited market with an innovative business model with no need of the large project finance requirements of current reigning technologies.

## Technology & product(s)

### General description:

DSC technology can best be described as 'artificial photosynthesis', using an electrolyte, a layer of titania (a pigment used in white paints) and ruthenium dye sandwiched between two substrates, at least one of which is transparent. Light striking the dye excites electrons which are absorbed by the titania to become electric current.

### Function of the product(s):

With its first generation of DSC modules, 3GSolar will be focusing its marketing efforts on rural off-grid markets, mainly in developing countries where close to 2 billion people live without electricity. The 3GSolar 55W modules will be sold and distributed to provide basic electricity in rural areas. Off-grid electrification will remain a market necessity and opportunity for decades to come. \$2 billion of off-grid systems are installed annually, growing by 15% a year.

## Objectives / Target companies

**On the Marketing/Distribution Side:** 3GSolar is interested in identifying strategic partners involved in the sales/distribution of PV systems or parts of them in developing countries with focus on off-grid Solar Home Systems.

**On the Financial Side:** In November 2008, 3GSolar was offered the opportunity to access public markets through acquisition by Vesta Capital Corp (a capital pool company on the Toronto stock exchange- see <http://www.marketwire.com/press-release/Vesta-Capital-Corp-TSX-VENTURE-VES.P-918712.html>). 3GSolar has seized this opportunity and, lead by underwriter Canaccord, is in mid-process of completing the acquisition towards raising funds on the Toronto Exchange.

Private placement by VC funds and investors is still of interest to 3GSolar, whether before, as part of or after its acquisition by Vesta Capital Corp.