



European
Commission

Green Plasma

Thin films for green energy

FUJIFILM



Fujifilm is pioneering a greener process technology to manufacture products like flexible solar cells in Tilburg, NL.

Photo: Green Plasma

OUR STORY

As a world leader in thin film coatings, Fujifilm is pioneering a more efficient and environmentally-friendly way of manufacturing flexible solar cells. Our new plasma-based technique saves energy and natural resources by depositing microscopically thin layers of material with a cloud of gas that we can now energise under standard pressure conditions.



Innovation



Efficiency



Environment

Larger with Life

In 2013-2016, the EU LIFE Programme invested €1.9 million in the €4.5 million Green Plasma project to help tailor a new manufacturing technique to the needs of its first customers. Fujifilm's so-called Atmospheric Pressure Glow plasma for Chemical Vapour Deposition (APG-CVD) has since broadened the options for manufacturing rolls of flexible solar cells. The new plasma-based technique consumes less energy and raw materials to produce the same quality of solar cells.

EU added value

- **Plasma-deposition 20% cheaper**
- **Greener solar cell manufacturing**
- **Shift to non-toxic raw materials**

Prospects

- **Estimated €500 million PV market**
- **Revitalise EU renewables industry**
- **Tech protected by 20+ patents**

Achievements

- Reduced **raw materials** wasted by plasma-deposition techniques from 80% to 10%
- Brought down **energy consumption** of plasma-deposition techniques by 95%
- Demonstrated the potential for production at web speeds of **50 meters a minute**
- Built a first on-site APG-CVD system for **customer demonstrations** in 2015

Policy support

- Accelerate the introduction of **renewable energy** in line with the energy union strategy
- Efficient use of **natural resources** as set out in the 7th environment action programme
- Strengthen industry and **competitiveness** in agreement with the EU industrial policy strategy

Contact

www.green-plasma.eu

E-mail: info@fujifilm.eu

Environment
& Climate
Action



LIFE supporting companies



The **LIFE Programme** has financed green innovation and clean tech solutions since its start in 1992. One of today's key priorities for LIFE is to support close-to-market projects delivering innovative environmental solutions, ensuring that they are sustainable and capable of being widely taken up by society in general, and the economy in particular.

The **Close-to-market initiative's** aim is to help and assist the LIFE projects with market potential to develop towards successfully maintaining project results via commercialisation and upscaling of the proposed innovative solutions.

How can LIFE support beneficiaries with close-to-market activities?

- Expert review of the close-to-market stage of your project and assessment of the close-to-market potential.
- Help with determining milestones and action points based on project readiness and assisting you with their progress during your project's whole lifecycle.
- Flexibility to use the LIFE project budget to get the necessary expertise including market analysis, detailed business plan preparation, coaching etc.
- Linking you with a network of advisers including the Enterprise Europe Network, coaches and accelerators.
- Assistance with financing and contacts with the investor community through events, introducing you to the SME Instrument and the European Investment Bank Group.
- Networking opportunities through LIFE platforms in order to build business partnerships with other key players.
- Gaining additional publicity for your innovative green solutions through the Innovation Radar platform and via dedicated handouts promoting close-to-market activities of LIFE.

“LIFE can help you to sustain and thrive even after the end of the LIFE project.”

LEARN MORE

 ec.europa.eu/life  [LIFE programme](#)
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HOW TO APPLY FOR LIFE FUNDING

The European Commission organises annual calls for proposals.
Full details are available at <http://ec.europa.eu/environment/life/funding/life.htm>
<https://ec.europa.eu/easme/en/your-close-market-proposals-tips-applying>

CONTACT

European Commission – Directorate-General for the Environment – B-1049 Brussels (env-life@ec.europa.eu)
European Commission – Directorate-General for Climate Action – B-1049 Brussels (clima-life@ec.europa.eu)
European Commission – Executive Agency for Small and Medium-sized Enterprises (EASME) – B-1049 Brussels (EASME-LIFE-ENQUIRIES@ec.europa.eu)

Print	-	ISBN -	doi: -
PDF	-	ISBN -	doi: -

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