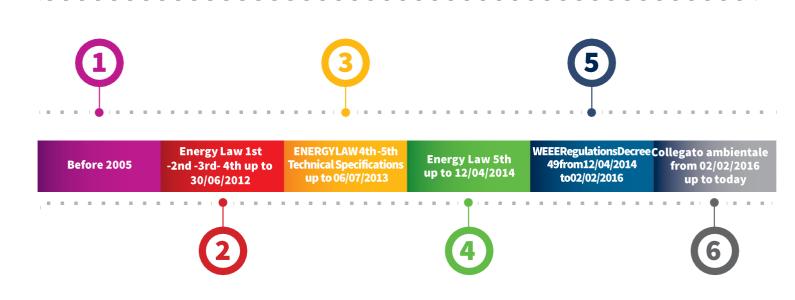


# PHOTOVOLTAIC WASTE MANAGEMENT Operating Instructions



This document illustrates the principal PV Waste Management procedures, in compliance with the provisions of the WEEE Regulations in force (Legislative Decree No. 49/2014), with the decrees regulating PV plants receiving feed-in tariffs under the Energy Law and the respective GSE Operating Instructions. Furthermore, the instructions outlined below provide information to be followed if the

Producer is a member of the PV CYCLE Italia Consorzio.

The principal PV waste management procedures can be identified because of the type of PV plant that originates the PV Modules to be disposed:

### 1. Historical PV modules prior to 2005, with reference to the period preceding the Energy Law feed-in-tariffs.

#### A. PV Modules from Household PV plants (< 10 KW total power)

The private citizen delivers the PV Modules to the municipal collection points independently or to the Installer/Distributorthat is obliged to perform the authorized transport and is required to deliver the waste to the municipal collection point; Collection and disposal costs: NO

The list of municipal collection points is provided here: https://www.cdcraee.it/cdcraee/jsp/skins/search-standalone/search-frame.jsp

#### B. PV Modules from Professional PV plants (> 10 KW total power)

#### Replacement with new PV Modules:

The Producer of the new PV Modules, in case of one-on-one replacement (art. 24 of Legislative Decree No. 49/2014), is required to take responsibility for the old PV modules to be disposed of, on a free of charge basis, regardless of the brand and model of the PV modules to be disposed of.

The following form is to be compiled if the Producer is a PV CYCLE Member:

http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf the compiled form is then to be sent to the PV CYCLE Member, who will arrange the collection with PV CYCLE.

#### Simple disposal:

The holder of the PV waste is required to pay the disposal costs in the case of disposal without replacement or in the case of replacement using historical PV modules stored in a warehouse.

http://www.pvcvclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf

Below the form to compile to request to PV CYCLE a quotation for the collection of disposal of the PV Waste:

# 2. Historical PV Modules referable to the period of validity of 1st, 2nd, 3rd and first part of the 4th Energy Law, up to 30/06/2012.

#### A. PV Modules from Household PV plants (< 10 KW total power)

The private citizen delivers the PV Modules to the municipal collection points independently or to the Installer/Distributorthat is obliged to perform the authorized transport and is required to deliver the waste to the municipal collection point; Collection and disposal costs: NO.

The list of municipal collection points is provided here https://www.cdcraee.it/cdcraee/jsp/skins/search-standalone/search-frame.jsp

ANNEX 8.1 «declaration of delivery of WEEE» signed by the Person Responsible for the PV Plant and by the municipal Collection Point is to be submitted to GSE in the case of a PV plant receiving Energy Law feed-in tariffs. In addition, the installation/maintenance technician that delivers the Household PV waste to the municipal collection point is also required to provide the PV Plant Responsible Person with the waste transport documents.

#### B. PV Modules from Professional PV plants (> 10 KW total power)

#### Replacement with new PV Modules:

The Producer of new PV modules, in case of one-on-one replacement (art. 24 of Legislative Decree No. 49/2014), is required to take responsibility for the old PV Modules to be disposed of, on a free of charge basis, regardless of the brand and model of the PV modules to be disposed of. The following form is to be compiled if the Producer is a PV CYCLE Member <a href="http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf">http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf</a> the compiled form is then to be sent to the PV CYCLE Member, that will arrange the collection with PV CYCLE.

#### Simple disposal:

The holder of the PV waste is required to pay the disposal costs in the case of disposal without replacement or in the case of replacement using historical PV Modules stored in a warehouse.

Below the form to compile to request to PV CYCLE a quotation for the collection of disposal of the PV Waste: <a href="http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf">http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf</a>
In this case, the GSE Operating Instructions envisage submitting the disposal documentation within 180 days from the date of the replacement notification, with the Formulario Rifiuti (FIR – Official document for waste transport in Italy) to be compiled by PV CYCLE and ANNEX 8.1 to be filled out by the PV Plant Responsible Person and signed by PV CYCLE. The complete GSE Operating Instructions in pdf format can be downloaded at the following link: <a href="http://www.pvcyclegroup.it/downloads/">http://www.pvcyclegroup.it/downloads/</a>

# 3. PV Modules from PV plants receiving feed-in tariffs under 4th or 5th Energy Law which became operational after 30th June 2012, Professional PV Modules (PV plants > 10 KW) and Household PV Modules (PV plants < 10KW).

If the PV Modules of the PV plant are registered with and guaranteed by PV CYCLE Italia, the Collection Request Form <a href="http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf">http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf</a> and the Excel List of serial numbers of the PV Modules to be disposed of must be sent to PV CYCLE...

PV CYCLE will perform the collection, transport and disposal.

Collection and disposal costs: NO

In this case the GSE Operating Instructions envisage submitting the disposal documentation within 180 days from the date of the replacement notification, with the Formulario Rifiuti (FIR – Official document for waste transport in Italy) to be compiled by PV CYCLE and ANNEX 8.1 to be filled out by the Plant Manager and signed by PV CYCLE.

The complete GSE Operating Instructions in pdf format can be downloaded at the following link:

http://www.pvcyclegroup.it/downloads/

## 4. PV Modules not receiving feed-in tariffs and installed after the end of the 5th Energy Law (between 06/07/2013 and 11/04/2014).

#### A. PV Modules from Household PV plants (< 10 KW total power)

The private citizen delivers the PV Modules to the municipal collection points independently or to the Installer/Distributor that is obliged to perform the authorized transport and is required to deliver the waste to the municipal collection point. Collection and disposal costs: NO

The list of municipal collection points is provided here https://www.cdcraee.it/cdcraee/jsp/skins/search-standalone/search-frame.jsp

#### B. PV Modules from Professional PV plants (>10 KW total power))

#### Replacement with new PV Modules:

The Producer of new PV modules, in case of one-on-one replacement (art. 24 of Legislative Decree No. 49/2014), is required to take responsibility for the old PV modules to be disposed of, on a free of charge basis, regardless of the brand and model of

the PV modules to be disposed of.

The following form is to be compiled, if the Producer is a PV CYCLE Member

http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf

the compiled form is then to be sent to the PV CYCLE Member, that will arrange the collection with PV CYCLE.

#### Simple disposal:

The holder of the PV waste is required to pay the disposal costs in the case of disposal without replacement or in the case of replacement using historical PV modules stored in a warehouse.

Below the form to compile to request to PV CYCLE a quotation for the collection of disposal of the PV Waste: <a href="http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE">http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE</a> PICK-UP-REQUEST-PV-rev 00 ENG.pdf

# 5. PV Modules installed between the entry into force of the new WEEE Legislation (Legislative Decree No. 49/2014) and the entry into force of the Collegato Ambientale (Law No. 221 of 28th December 2015), namely, between 12/04/2014 and 01/02/2016 (limits included).

#### A. PV Modules from Household PV plants (< 10 KW total power)

The private citizen delivers the PV Modules to the municipal collection point independently or to the Installer/Distributor that is obliged to perform the authorized transport and is required to deliver the waste to the municipal collection point. Collection and disposal costs: NO

The list of collection points is provided here:

https://www.cdcraee.it/cdcraee/jsp/skins/search-standalone/search-frame.jsp

#### B. PV Modules from Professional PV plants (>10 KW total power)

Refer to the Producer of the PV Modules (editor's note - the first Producer that marketed the PV Modules on the Italian Market). The Producer's Collective System will deal with the PV waste management.

Collection and disposal costs: NO (only valid for PV CYCLE Italia Members).

Replacement with new PV Modules: in this case the Producer of the old PV Modules is required to take responsibility for the collection and disposal of the PV Modules using its own collective system.

If the Producer is a PV CYCLE Member

http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf the compiled form is then to be sent to the PV CYCLE Member, that will arrange the collection with PV CYCLE.

## 6. PV Modules installed after entry into force of the Collegato Ambientale (Law No. 221, of 28th December 2015), namely, from 02/02/2016 to today.

#### A. PV Modules from Household PV plants (< 10 KW total power)

The private citizen delivers the PV Modules to the municipal collection point independently or to the Installer/Distributor that is obliged to perform the authorized transport and is required to deliver the waste to the municipal collection point; Collection and disposal costs: NO

The list of municipal collection point is provided here: https://www.cdcraee.it/cdcraee/jsp/skins/search-standalone/search-frame.jsp

#### B. PV Modules from Professional PV plants (>10 KW total power)

Refer to the Producer of the PV Modules (editor's note - the first Producer that marketed the PV Modules on the Italian Market). The Producer's Collective System will deal with PV waste management.

Collection and disposal costs: NO (only valid for PV CYCLE Italia Members).

Replacement with new PV Modules: in this case the Producer of the old PV Modules is required to take responsibility for the collection and disposal of the PV Modules using its own collective system.

If the Producer is a PV CYCLE Member

http://www.pvcvclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REOUEST-PV-rev\_00\_ENG.pdf

the compiled form is then to be sent to the PV CYCLE Member, that will arrange the collection with PV CYCLE.

#### 7. PV Modules Registered with and Guaranteed by PV CYCLE Italia

If the PV Modules are registered with and guaranteed by PV CYCLE Italia, then this can be verified directly on our website by uploading a file in .CSV format with the list of the serial numbers of the PV Modules.

https://registeritalv.pvcvcle.org/it/fase-1-compila-il-modulo-di-richiesta.html

To request the collection and disposal, send the following Collection Request Form

http://www.pvcyclegroup.it/wp-content/uploads/2018/03/PV-CYCLE\_PICK-UP-REQUEST-PV-rev\_00\_ENG.pdf

and the Excel List of the serial numbers of the PV Modules to be disposed of to PV CYCLE Italia.

PV CYCLE will perform the collection, transport and disposal.

Collection and disposal costs: NO