

Naked Energy.



Guidance on recycling of Virtu products

March 2024

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1. Purpose of the document

The purpose of the document is to serve as a comprehensive guide to recycling of Virtu solar-thermal collectors, providing individuals and businesses with practical information and tips to effectively recycle our product and contribute to environmental conservation. It aims to educate readers about the recycling process, different types of recyclable materials and guidelines for proper recycling practices.

2. Introduction

The end-of-life phase of solar thermal collectors presents opportunities for reusability and recycling. This document explores the recyclability of the thermal-only product, VirtuHOT and the hybrid VirtuPVT product, along with outlining recycling opportunities within the Virtu auxiliary installation kit. This document aims to promote sustainability and circular economy practices in the renewable heat sector.

3. VirtuHOT disassembly and recycling

- To begin the disassembly process, carefully release the vacuum from the Virtu tube by gently lifting the vacuum button located at the end cap with a feedthrough. **Always wear safety glasses when handling tubes under vacuum!**
- Carefully separate the main body of the glass tube from the end caps. Please contact Naked Energy representative on best methods of separation.
- Undo the fixings on the end cap with the feedthroughs.
- The brass feedthrough and metal fixings such as brass washers and nuts can be recycled at any mixed metal facility.
- Manually separate the aluminium radiation shield from the main body of the collector. **Please be cautious of the sharp edges of the aluminium parts!**
- Manually separate the copper tubing from the aluminium absorber surface. You can recycle the copper tubing at any mixed metal facility alongside the aluminium absorber and radiation shield.

- Send the borosilicate glass tube back to Naked Energy by requesting pick up with one of our representatives; refer to the contact information section below for assistance. Unfortunately, we cannot accept damaged glass tubes for reuse. Please take great care when separating the end caps from the main glass body of the collector.

4. VirtuPVT disassembly and recycling

- To begin the disassembly process, carefully release the vacuum from the Virtu tube by gently lifting the vacuum button located at the end cap with a feedthrough. **Always wear safety glasses when handling tubes under vacuum!**
- Carefully separate the main body of the glass tube from the end caps. Please contact Naked Energy representative on best methods of separation.
- Undo the fixings on the end cap with the feedthroughs.
- The brass feedthrough and metal fixings, such as brass washers and nuts, can be recycled at any mixed metal facility.
- Send off the PVT component (aluminium heat plate with PV cells laminated to the surface) to Naked Energy's WEEE disposal service - Beyondly Ltd. You can find Beyondly contact details below. If outside the UK, refer to local guidance on electric product disposal to adhere to legislation correctly.
- Send the borosilicate glass tube back to Naked Energy by requesting a pickup with one of our representatives; refer to the contact information section below for assistance. Unfortunately, we cannot accept damaged glass tubes for reuse. Please take great care when separating the end caps from the main glass body of the collector.

5. Auxiliary kit disassembly and recycling

- Disassemble aluminium frames by loosening the bolts between the frames and ballast trays. These can be recycled at any mixed metal recycling facility.
- The manifolds are made of annealed copper, and these can also be recycled at the nearest mixed metal recycling facility.

- Reflectors are not recyclable and should be disposed of at a facility allowing for the disposal of composite metals.

6. Key Contacts

- 1) Naked Energy representative (for arranging collection of borosilicate tubes)

Maria Zagorulko, m.zagorulko@nakedenergy.com

Website: Naked Energy

- 2) Beyondly WEEE service

Membership no.: WEE/MM3623AA

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Website: WEEE Compliance - Beyondly