

Step 1: The following details should be entered into the water heating section:

The screenshot shows the SEAI-DEAP software interface. The title bar reads 'SEAI-DEAP'. The header includes the SEAI logo (Sustainable Energy Authority of Ireland) and the text 'Dwelling Energy Assessment Procedure (DEAP) Not logged in'. A left-hand menu contains options like 'Start', 'Property and assessor details', 'Dimensions', 'Ventilation', 'Building elements', 'Water heating' (highlighted), 'Lighting and internal gains', 'Net space heat demand', 'Dist. system losses and gains', 'Energy requirements', 'Summer internal temperature', and 'Results'. Below the menu, it says 'DEAP Version: 3.1.0 Copyright © 2006-2010 The Sustainable Energy Authority of Ireland. All rights reserved.' At the bottom, a note reads 'If Yes keep copy of certified data on file'.

The main content area is titled 'Water heating' and contains several sections of input fields:

- Options:**
 - Are there distribution losses?
 - Are there storage losses?
 - Is there a solar water heating system? [Enter solar water heating](#)
 - Is supplementary electric water heating used in summer?
 - Is there a combi-boiler?
- General:**
 - Standard number of occupants:
 - Daily hot water usage [Litres]:
 - Hot water energy requirements at taps [kWh/y]:
 - Total hot water demand [kWh/y]:
 - Solar hot water input, Q_s [kWh/y]:
- Storage losses:**
 - Water storage volume [Litres]:
 - Temperature factor unadjusted:
 - Is manufacturer's declared loss factor available?
 - Temperature factor multiplier:
- Loss factor not available:**
 - Insulation type on water store:
 - Insulation thickness [mm]:
 - Hot water storage loss factor [kWh/l d]:
 - Volume factor:
- Storage loss and energy output:**
 - Storage loss [kWh/y]:
 - Storage loss adjusted for dedicated solar storage [kWh/y]:
 - Primary circuit loss type:
 - Primary circuit loss [kWh/y]:
 - Primary circuit loss adjusted for occupancy [kWh/y]:

Step 2: Enter the solar water heating info as follows:

The screenshot shows the 'Solar Water Heating' configuration window in the SEAI-DEAP software. The interface includes a menu on the left and a main form with various input fields and dropdown menus. The 'Solar panel manufacturer' is set to 'ENERGIE' and the 'Solar panel model' is 'Eco 280i'. Other inputs include 'Aperture area of solar collector' (3.2), 'Zero loss collector efficiency' (0.75), 'Collector heat loss coefficient' (6), 'Collector performance ratio' (8), 'Annual solar radiation' (1076), 'Overshading factor' (1), and 'Solar energy available' (2582). Storage-related inputs include 'Dedicated solar storage volume' (280), 'Is solar storage contained within a combined cylinder?' (No), and 'Total volume of cylinder' (1339). The 'Solar to load ratio' is 0.68, 'Utilisation factor' is 0.77, and 'Adjusted utilisation factor' is 0.77. The 'Collector performance factor' is 0.64. Under 'Solar water heating', 'Is solar water heating pump solar powered?' is set to 'No' and 'Electricity consumption of SWH pump' is 75. The 'Result' section shows 'Solar hot water input, Qs' as 1339. At the bottom, 'Output from main water heater' is 2463 and 'Heat gains from water heating system' is 87. The software version is 3.1.0, and the copyright is 2008-2010 by the Sustainable Energy Authority of Ireland.

Parameter	Value
Solar panel manufacturer	ENERGIE
Solar panel model	Eco 280i
Aperture area of solar collector [m ²]	3.2
Zero loss collector efficiency η_0	0.75
Collector heat loss coefficient, a_1 [W/m ² K]	6
Collector performance ratio [W/m ² K]	8
Annual solar radiation [kWh/m ²]	1076
Overshading factor	1
Solar energy available [kWh/y]	2582
Solar to load ratio	0.68
Utilisation factor	0.77
Adjusted utilisation factor	0.77
Collector performance factor	0.64
Dedicated solar storage volume [Litres]	280
Is solar storage contained within a combined cylinder?	No
Total volume of cylinder [Litres]	1339
Effective solar volume, V_{eff} [litres]	280
Daily hot water usage, V_d [litres]	210
Volume ratio, V_{eff}/V_d	1.33
Solar storage volume factor (V_{eff}/V_d)	1.06
Solar hot water input, Q_s [kWh/y]	1339
Output from main water heater [kWh/y]	2463
Heat gains from water heating system [W]	87

Step 3: Next we need to take the heat pump side into account: The following should be entered in the Energy Requirements Section under the Water Heating Tab:

The screenshot displays the SEAI-DEAP software interface. The top header includes the SEAI logo (Sustainable Energy Authority of Ireland) and the title "Dwelling Energy Assessment Procedure (DEAP) Not logged in".

On the left side, there is a "Menu" section with options: Import or Download, New Assessment, Save, Save As, Detailed Report, Find existing record, Log In, and MPRN Address Search. Below it is a "More Options" section with: Clear all fields, Export or Upload, and DEAP Manual. A "Results" box shows: Energy Rating: A2, Energy Value: 29.34 [kWh/m²/yr], and CO₂ Emissions Indicator: 6.99 [kgCO₂/m²/yr]. At the bottom left, it states "DEAP Version: 3.1.0 Copyright © 2006-2010 The Sustainable Energy Authority of Ireland. All rights reserved".

The main area is titled "Energy requirements" and has a dropdown menu for "Select space heating type:" set to "Individual". Below this are four tabs: "Space heating", "Water heating" (which is selected), "Pumps, fans and electric keep-hot facility", and "Fuel data".

The "Water heating" tab contains the following input fields:

- Efficiency of main water heating system [%]: 250 (with a "Copy from space heating" link)
- Manufacturer name: ENERGIE
- Model name: Eco 280i
- Efficiency adjustment factor: 1
- Adjusted efficiency of main water heating system [%]: 250
- Energy required for main water heater [kWh/y]: 1267
- Energy required for secondary water heater [kWh/y]: 0

A vertical sidebar on the left of the main area contains buttons for: Start, Property and assessor details, Dimensions, Ventilation, Building elements, Water heating (highlighted), Lighting and internal gains, Net space heat demand, Dist. system losses and gains, Energy requirements (highlighted), Summer internal temperature, and Results.