



AquaRET

E-learning Tool



Education and Culture

Leonardo da Vinci

**AQUATIC RENEWABLE ENERGY TECHNOLOGIES (AQUA-RET) IS A AQUATIC RENEWABLE ENERGY LEARNING
TOOL FUNDED BY THE EU LEONARDO DA VINCI PROGRAMME**

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i. Welcome to Aqua-RET

Aquatic Renewable Energy Technologies (Aqua-RET) is an e-learning tool promoting aquatic renewable technologies. It is an EU-funded Leonardo da Vinci project, making a real contribution to technology transfer activities within the sector.

The power of water has been harnessed for thousands of years. Today, there is an urgency demonstrated across Europe to provide more electricity generated by renewable energy to meet EU and Kyoto regulations in response to climate change. The EU Parliament recently adopted a report which calls for an increase in electricity generated from renewable energy sources from 12.2% in 2002 to 20% by 2020 (COM (2004) 366, The Share of Renewable Energy in the EU, 29/09/05). To meet this quota there has been a corresponding growth in interest in offshore renewable energy technologies, such as offshore wind, wave and tidal stream.

However, the introduction of new technologies is often greeted with resistance from the general public, professionals and institutions. The experience of land based renewable energy, and particularly wind farms, provides a classic example of how a failure to provide basic information and to educate key stakeholders can lead to a significant degree of animosity and misunderstanding.

Aqua-RET aims to prevent this information gap by providing an e-learning tool which demonstrates to the user, in straightforward steps, how these technologies work, where & how they fit into the landscape, and how they benefit the economy.

ii. About Aqua-RET

Aquatic Renewable Energy Technologies (Aqua-RET) is a marine renewables e-learning tool. It is an EU funded Leonardo da Vinci project which was started in 2006 by a consortium of eight partners from six European countries (Cyprus, Greece, Ireland, Portugal, Romania and the United Kingdom). Aqua-RET makes a real contribution to dissemination and technology transfer activities within the sector.

ii.i. Why is Aqua-RET needed?

Europe needs to provide more electricity generated by renewable energy to meet EU and Kyoto regulations and agreements. Consequently, there has been a growing interest in aquatic renewable energy technologies, such as offshore wind, wave, tidal stream, tidal impoundment, and run-of-river. The introduction of new technologies is often greeted with resistance from the general public, professionals and institutions. The experience of land based renewable energy, and particularly wind farms, provides a classic example of how a failure to provide basic information and to educate key stakeholders can lead to a significant degree of unnecessary animosity and misunderstanding.

ii.ii. Aqua-RET Aims

The aims of the project include the following:

1) To develop and provide e-learning resources

Aqua-RET e-learning resources are suitable for a range of stakeholders in the energy sector including the public, planners, energy advisors, developers and people working in ancillary sectors who need to know how aquatic renewable energy technologies work to make informed decisions. The e-learning resources will be available online or on CD-ROM for energy-related businesses and energy advice centres throughout Europe. These resources are distinctive and cater specifically for the marine areas of offshore wind, wave or tidal stream technologies.

2) To transfer practical, technical, information

Aqua-RET will promote practical applications of renewable energy operations and technologies using the latest in information communication technologies (ICT). The step-by-step teaching approach will enable users to learn at their own speed. Each module relies heavily on multimedia applications and each level of the module will increase in complexity, so as to progressively build the competency of the user.

3) To promote useful and sustainable sources of marine & aquatic renewable energies

Aqua-RET has a dedicated module to examine the relationship of aquatic renewable energy technologies to the local environment and will illustrate to the user how to keep its ecological footprint to a minimum. Delays in planning through uninformed objections are most often the result of a lack of understanding and knowledge of how aquatic renewable technologies fit into the local environment. Aqua-RET will curb such incidents by providing information about the technology and environmental impact of aquatic renewable energy technologies.

4) To promote technology transfer

Across Europe, there is an imbalance between Atlantic Europe and most other marine areas with respect to marine renewable energy technologies. Most of the development and construction work on marine renewable energy technologies is taking place in Western Europe whilst the Mediterranean and Black Sea areas have seen little development. This project aims for a mutual exchange, with information about wind, wave and tidal stream energy travelling eastward, whilst information on novel new methods of hydro and micro-hydro generation travels westward.

Collectively, the aims will enable Aqua-RET to achieve its objective to engage users in order to improve their understanding about aquatic renewable energy, increase their tolerance of the impacts associated with aquatic renewable energy, and contribute to greater competence in dealing with the issues associated with aquatic renewable energy.

ii.iii. Who should use Aqua-RET?

Aqua-RET is suitable for a range of stakeholders in the energy sector, including the public, planners, energy advisors, developers, and people working in ancillary sectors who need to know how aquatic renewable energy technologies work in order to make informed decisions.

ii.iv. What Aqua-RET provides

Aqua-RET will provide an e-learning tool available online or on CD-ROM, and is supported by an educational poster series. The objective of the e-learning tool is to show the user, in straightforward steps, how aquatic renewable energy technologies work, how they benefit the economy, where and how they fit into the landscape and the important environmental considerations to take into account when planning and selecting sites for generating power.

iii. E-learning Tool (E-learning home page)

iii.i. User Guide

The following pages show the users, who are not familiar with website navigation, how to navigate through the website

Aqua-RET website quick-start user guide

1) Main Aqua-RET Homepage



The screenshot shows the Aqua-RET website homepage with several callout boxes providing instructions:

- Font-size:** bigger, smaller, reset (Use to resize website text)
- Language flags:** Click a flag to choose between the English, Greek, Romanian and Portuguese language versions
- Homepage:** Click to view information about the people behind the Aqua-RET project
- User Guide:** Click here to access the Aqua-RET E-learning Tool
- About Aqua-RET:** Click to view background information about the Aqua-RET project
- E-Learning Tool:** Click here at any time to return to the main Aqua-RET homepage
- Consortium & Contacts:** Click here to access the Aqua-RET E-learning Tool

The main content area of the homepage includes:

Welcome to Aqua-RET

Aquatic Renewable Energy Technologies (Aqua-RET) is an e-learning tool promoting aquatic renewable technologies. It is an EU-funded Leonardo da Vinci project, making a real contribution to technology transfer activities within the sector.

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2) E-learning Tool homepage

The screenshot shows the AQUARET E-learning Tool homepage. At the top left, there is a font size selector with buttons for 'bigger', 'smaller', and 'reset'. Below this is the AQUARET logo and a banner for 'Aquatic renewable energy technologies'. A navigation bar contains links for 'Home', 'Technology selection', 'Specific country information', and 'Downloads and resources'. To the right of the navigation bar are flags for the UK, Romania, Portugal, Greece, and Cyprus. Below the navigation bar, there is a 'Please give us feedback' link and a 'You are here: Home > E-Learning Tool' breadcrumb. The main content area is titled 'Technology selection' and features several icons: 'Run of River', 'Tidal Impoundment', 'Tidal Stream', 'Wave', 'Offshore Wind', 'Further reading', 'Supporting activities', and 'Other technologies'. Red lines connect these elements to explanatory text boxes on the right side of the page.

Use to resize website text

Font size: bigger smaller reset

Home Technology selection Specific country information Downloads and resources

You are here: Home > E-Learning Tool

Please give us feedback

Technology selection

Run of River Tidal Impoundment Tidal Stream

Wave Offshore Wind

Further reading

Supporting activities Other technologies

Click here to access country-specific information for: the **UK, Romania, Portugal, Greece, and Cyprus**

Click here to download selected Aqua-RET resources

Click a flag to choose between the **English, Greek, Romanian and Portuguese** language versions of the website

Click an image to select additional information. Clockwise from top: **Further Reading, Supporting Activities and Other Technologies**

Click an image to select a technology type. Clockwise from top left: **Run-of-river, Tidal Impoundment, Tidal Stream, Offshore Wind and Wave**

Click here at any time to return to the **E-learning Tool** homepage

Click here at any time to return to the main **Aqua-RET homepage**

3) Specific Country Information



To access PDF files of country-specific information, click on the "Information is provided in the native language of the respective country and in English" to navigate to the download table



		Country Information				
		UK	Cyprus	Greece	Romania	Portugal
Language	English					
	Greek					
	Romanian					
	Portuguese					

To download a PDF, identify the desired country and language and click on the corresponding PDF icon in the table; e.g. click on this icon to access information on Portugal written in English shown above.

NB, country-specific information is available in English and the language of the country in question (with the exception of Cyprus where Greek was chosen).

4) Downloads and Resources

Font-size: [bigger](#) [smaller](#) [reset](#)

Home Technology selection Specific country information Downloads and resources

You are here: [Home](#) > [E-Learning Tool](#) > Downloads and resources

Click on a subheading to select the desired download section, e.g. **Download Images and Illustrations**

- Downloads and resources
- Manuals/Text books
- Posters
- Expected Learning Outcome charts
- Teacher/other guides
- Download Images and Illustrations
- Where to get CD-ROM etc.

Downloads and Resources

The following section contains information about:

- Additional resources that can be downloaded
 - manual/Textbook
 - Posters
 - Expected Learning Outcome Charts
 - Teacher/Other Guides
 - Download Images and Illustrations
- Information on where to get the CD-ROM/USB key



Font-size: [bigger](#) [smaller](#) [reset](#)

Home Technology selection Specific country information Downloads and resources

You are here: [Home](#) > [E-Learning Tool](#) > [Downloads and resources](#) > [Download Images and Illustrations](#)

To download an illustration, click on the thumbnail to display it within your browser.

Alternatively, to download an illustration directly to your PC or network, right-click on the thumbnail and select **Save Target As**, browse to the desired location and click the **Save** button.

Download Images and Illustrations

The following table contains images and illustrations that can be downloaded. Click on the image to download it. More information is available on the "E-learning Tool" page and on the "Country Specific Information" page.

Description	Thumbnail
Posters	
Run-of-river poster.	
Tidal impoundment poster.	