



ENVIRONMENT HANDBOOK
APOKORONAS
2014

Environment 1939@gmail.com



CONTENTS

	Page
1. ABOUT US	3
2. APOKORONAS	4
3. WASTE	5
4. COUNTRYSIDE	8
5. WATER	9
6. ENERGY	13
7. ENVIRONMENTAL EDUCATION	16
8. BOOKS	19
9. POEMS	21
10. USEFUL PHONE NUMBERS	23



ABOUT US

The Environmental Group is committed to finding practical solutions to the challenges we face in the Apokoronas region. If you would like to participate and volunteer to help us change the environment for the better, your input would be most welcome. Please contact us at:

environment1939@gmail.com

PURPOSE AND PRINCIPLES

The Group has no political affiliation. It is committed to working with the municipality of the Apokoronas to improve the environmental wellbeing of the community and to promote best practice. The group will act according to democratic principles: accountability, transparency and equal treatment for all.

PROGRAMME

To assist in environmental initiatives.

To share knowledge and encourage education in areas of environmental concern and to participate in creating a clean, environmentally safe region.

To foster long-term relationships with the municipality and other environmental groups.

THIS HANDBOOK

This handbook will be continually updated as more information becomes available. If you have any comments or suggestions on how to improve the content or quality of the handbook or would like to help keep it updated please let us know at environment1939@gmail.com.

DISCLAIMER

Although the authors have taken all reasonable care in preparing this handbook, we make no warranty about the accuracy or completeness of its content and, to the maximum extent permitted, disclaim all liability arising from its use.

APOKORONAS

Apokoronas is a region of north-west Crete, in Chania Prefecture, to the east of Chania. The Apokoronas extends from the foothills of the White Mountains north to the coast, in a wide plain with rolling hills. To the east, Cape Drapanon rises above the plain and extends out into the Sea of Crete. The area is very green and fertile, unusual for rocky Crete. The Koiliaris River, known in antiquity as 'Pyknos', runs through the region. Robert Pashley suggested that the name 'Apokoronas' came from the ancient city of Ippokoronas or Ippokoronion, also cited by Strabo. This city may have been located near modern Nippos, or on the site of the Venetian fortress, Castel Apicorono, on an outcrop between Kalyves and Almyrida. The major towns of Apokoronas are Vamos, Armeni and Vrisses, with police, municipal and utility offices as well as tavernas and large churches; Kalyves, Almyrida and Georgiupolis are the largest beach resorts. Tourism and agriculture are the major local industries, with much construction and quarrying to satisfy the demands of many foreigners eager to buy or rent properties in what used to be beautiful and traditional villages. Gavalohori, Kokkino Horio and Megala Horafia are among the more popular villages for foreign buyers, with a large amount of often low-quality building taking place. Many residents or workers in Chania also have homes in the area. Apokoronas is a province of Greece with its capital at VRYSESSES. Prior to 2011, the area was divided into several municipalities several municipalities, within Chania prefecture. The accompanying map shows these now out-of-date municipalities, simply to help you see the extent of the new municipality of Apokoronas.



WASTE

GENERAL

What to do with household waste and rubbish is an ongoing problem in Greece generally and Crete is no exception. The municipality of Apokoronas collects Household waste bins (mainly GREEN) and the recycling bins which are BLUE. Other recyclable materials are dealt with largely by special arrangement with the municipality, or by a number of shops and other premises.

Always empty recycling into the blue bins; do not put the bag containing the material to be recycled in the blue bin. Instead, empty the bag straight into the bin and then put the bag in separately, or take it home for re-use

The following information will help you in identifying how to dispose or recycle your rubbish in an environmentally friendly way. Please look carefully through the pages and do your best to follow the advice. That way, we can begin to improve our environment here in Apokoronas.

General household rubbish collection is for the day to day rubbish generated from living within the house, such as kitchen waste, food packaging, nappies etc. This does **not** include waste from home improvements. Garden waste will not be collected in black plastic sacks. An average of 70% of this waste can be recycled by fully using our kerbside services.

Residents are now recycling more than 36% of their waste, and this means that the amount of rubbish that we throw into landfill is dropping. This is great news for the environment, helping to reduce landscape destruction and loss of natural habitats and wildlife. It also helps to reduce emissions of methane, which is global warming gas with an impact 23 times stronger than carbon dioxide! Reducing and recycling your waste also helps conserve natural resources like oil, and save energy. So do your bit by recycling as much as possible and reducing your waste.

General household rubbish collection is for the day to day rubbish generated from living within the home. This does not include waste from home improvements.

BIN VARIANTS

Here are some descriptions of the HOUSEHOLD WASTE BINS that we have seen in Apokoronas.

- Green plastic bins
- Galvanised steel bins with yellow lids
- Galvanised steel bins with green lids
- Galvanised steel bins with unpainted lids
- Fluorescent red bins
- Black plastic bins



WASTE BINS

The waste bins are for HOUSEHOLD WASTE only

Place waste into bin bags/sacks prior to placing them in the waste bins

Broken sheet glass (wrapped please for safety) can also be put in the WASTE bins.

Never put any recyclable items or materials in the waste bins

BLUE BINS

Blue Bins are used for RECYCLING WASTE such as all packaging, tin cans, aluminium cans and plastic bottles.

Always crush plastic bottles and cardboard boxes to maximise the capacity of the bins

Never put aluminium cans inside tin cans; the two metals are recycled separately

Never put normal waste into the blue bins

Glass jar bottles are not to be put in the blue bins; they present a health hazard in manual sorting and are separately crushed and used in the capping process for the landfill

Never put batteries, light bulbs, fluorescent tubes, electrical goods, bulky items and garden and tree pruning waste in the blue bins.

GARDEN WASTE

Compost all vegetable and green waste at your property whenever possible. If you are not able to compost it, please bag it up and put it in the HOUSEHOLD WASTE bins or if it is a large quantity, bag it up and put it alongside the household waste bins. Don't just leave cuttings and prunings loose.

BULKY ELECTRICAL WASTE

The municipality organises a regular collection of such items. Call Katarina on 28250 23220. and she will advise you when and where to leave your item.

BATTERIES

Used batteries should be deposited in the special containers that shops have for that purpose (see recycling locations section in this handbook).

SMALL ELECTRICAL APPLIANCES

Used or broken appliances should be deposited in the special containers that shops have for that purpose (see recycling locations section in this handbook).



COMPUTER EQUIPMENT

Used computers and equipment should be deposited in the special containers that shops have for that purpose (see recycling locations section in this handbook).

LIGHT BULBS

Used bulbs/globes should be deposited in the special containers that shops have for that purpose (see recycling locations section in this handbook).

FLOURESCENT TUBES

Used tubes should be deposited in the special containers that shops have for that purpose (see recycling locations section in this handbook).

WASTE COLLECTION STRIKE

If there is a strike, a separate communication will be issued via websites such as Apokoronasourhome and Gyfrabridge website.

SHOPPING BAGS

Reject the use of PLASTIC BAGS in the shops; take a shopping bag or reusable supermarket bag, why? "Plastic bags that are handed out in shops and supermarkets are degradable, but NOT bio-degradable. That means that over time they just fragment into ever smaller pieces which blow all over the place and eventually enter our food chain. Please take a shopping bag with you when you shop instead of taking the plastic bags available.

Spread the word - tell your friends and neighbours – lead by example

Where possible, use paper rather than plastic bags when shopping for fruit and vegetables

Use only what you need – in other words, don't waste!

ABANDONED CARS AND MOTORCYCLES

First report the vehicle to the council 28253 23220. Give the location and the name of the owner if you know it. The council will then put a notice on it telling the owner to move it by a certain date. If it is not moved the council will remove it and charge the owner.

REPORTING ILLEGAL DUMPED RUBBISH

Rubbish that has been dumped by the side of the road or bins that have not been emptied please call 28253 23220.

RECYCLING LOCATIONS

LIGHTBULBS

Georgioupolis	Town Hall
Vrysses	Inside the council offices
Vamos	Health Centre (fluorescent tubes)
Kokkino Horio	Minimarket
Plaka	Electrical shop

BATTERIES

Vamos	Health Centre
Kalyves	Germanos Town Hall Lilikaki's photocopy shop
Kokkino Horio	Mini Market
Plaka	Electrical shop

PRINTER INK CARTRIDGES AND MOBILE PHONES

Kalyves	Germanos
---------	----------

GLASS WINE BOTTLES

Kokkino Horio	Glass factory (must be delivered <u>INSIDE GATES</u>)
---------------	--

SMALL ELECTRICAL IMPLEMENTS

Kokkino Horio	Minimarket,
Vrysses	town hall,

COUNTRYSIDE

FLORA AND FAUNA

The Environment Group News (EGN) which is circulated by e-mail regularly usually contains items of local interest regarding what is in bloom at the time, or animals/insects etc seen. In addition to this, David Capon is in charge of a Habitat Survey which involves various groups of people reporting back to David on what they have seen and where. It is more detailed than that, but any questions should be directed to David at david@artoncrete.me.uk

LEGAL ACCESS.

The situation is somewhat analogous to that in Scotland where there are no public rights of way but where people are allowed access on the understanding that they cause no damage, or do not deliberately enter places that are clearly fenced off and locked. This means that in the main, the agricultural tracks which abound in the area are open to the public. Even where a plegma 'gate' has been put across a track, provided it is not locked or so securely tied as to prevent easy access, then it is open to public use; with the proviso that such a 'gate' should be left as found (open or closed as the case may be). It should be noted that these tracks generally provide access to plots which are private and which should not be entered without the owner's permission.

OLD DONKEY TRACKS AND TRAILS

The situation here is unclear and it is quite likely that some of them will cross 'private' land. The municipality has access to some old (late 1960's to early 1970's) military maps on a scale of 1:5000 which show such trails. Technically the trails should be open but in practice they are often closed off by landowners. Tracking these down is time-consuming and costly and therefore not at the top of the municipality agenda.

ARGICULTURAL ANIMALS

Defined as sheep, goats, cows etc. There are definite rules and methods, to meet sanitary requirements. Farmers can bury dead animals on their land in pits with quick-lime. They should NOT be put in the normal waste bins (as happens in some of the villages). If one encounters dead sheep/goats etc on the road, it is believed that the owners will collect them as it is in their own (financial) interest to do so.

DOMESTIC ANIMALS

Defined as, cats, dogs etc, the situation is less clear. Normally it is the owner's responsibility to dispose of the animals in a responsible manner (not defined but doesn't mean putting them in waste bins for collection.) In case of any doubt, contact any vet. The vet will charge a fee. Not all dead domestic animals have 'owners' and in that case people are encouraged to remove them from the road and call the Municipality (call Katarina on 28250 23220) to arrange for collection. She is responsible for organising collection of bulky items.)

WATER

Water is one of the world's most precious resources and yet we are all very good at wasting it!

If you see a water leak in your area, please report it to the council (phone Katarina on 28250 23220)

Water Conservation in the home – a few tips:



Leaving a tap running while you are cleaning your teeth, or washing fruit and vegetables can waste about nine litres of water a minute. Instead of letting water and money go down the drain, here are some ways to cut down on wastage:

- save the cold water that comes through before a tap runs hot, and use it to water plants
- keep a jug of water in the fridge instead of waiting for the tap to run cold
- turn off the taps when you're brushing your teeth or shaving
- wash fruit and vegetables in a washing-up bowl full of water instead of under a running tap

Flush less water down the toilet

Toilet flushing accounts for about a third of household water usage. You probably flush away as much water in a day as you drink in a whole month. There are easy ways to reduce this:

- install a water saving bag (or even a brick!) in the cistern of a higher flush toilet - this reduces the water used with each flush
- when buying a new toilet, choose a water-saving, low-flush or dual-flush version
- fit a variable flushing device to existing higher flush toilets - this will give you a choice of flush volumes to help save water

Take shorter showers

A quick shower can use much less water than a bath. However, not all showers are water efficient. High volume power showers can use more water than a bath in less than five minutes.

To save water, you could use a shower timer to reduce your time in the shower. One minute off your shower time, for a family of four would save 12,000 litres of water a year.

Fit a flow regulator or aerated shower head. Fitting a water flow regulator to your shower head reduces the amount of water used by about 30 per cent. This will not reduce the performance of your shower.

Use water-efficient appliances – washing machines, dishwashers

The amount of water consumed by dishwashers and washing machines varies greatly.

All new dishwashers and washing machines have a European (EU) energy label, which tells you how efficient the appliance is at using water and energy. A is most efficient and G is least efficient, so choosing carefully can save you money, water and energy. You could also:

- look for a washing machine that uses less than 50 litres per wash
- look for a dishwasher that uses less than 15 litres per wash
- try to use appliances only when they're full - half-load cycles **use much more than half the** energy and water of a full load

Fix dripping taps and leaks

A dripping tap can waste up to 15 litres of water a day. Water leaks mean you're paying for water you haven't used. They can also cause a lot of damage to your property and possibly to neighbouring properties.

These simple plumbing jobs can save a lot of water without being expensive:

- fix dripping taps or overflows; a new washer costs just a few eurocents and can be fitted in minutes
- install a leak detector to warn you about leaks anywhere in your house

WATER RESOURCES

In the last 3 years the Municipality has improved its water storage and distribution network while acknowledging that there is still more to be done.

BEACHES

The municipality makes recommendations to various ministries in Athens each year as to which beaches should be awarded a Blue Flag. Their recommendations are examined and the beaches are inspected. Only those passing the inspection are awarded the flag. The municipality is establishing a Beach Committee to oversee all aspects of the beaches (late 2013 information) The responsibility of sampling and analyzing the water quality falls to a private laboratory in Rethymno. Generally the water quality has been declared very good in the past.

Here is more information on the background to the Blue Flag scheme.

(information provided by kind permission of FEE Denmark)

HISTORY

The concept of the Blue Flag was born in France. In 1985, French coastal municipalities were awarded with the Blue Flag for complying with sewage treatment and bathing water quality criteria.

In 1987, the "European Year of the Environment", the Foundation for Environmental Education in Europe (FEEE) presented the French concept to the European Commission, and the Blue Flag Programme was launched as one of the year's community activities.

In addition to sewage treatment and bathing water quality, criteria for obtaining a Blue Flag on a European level included other areas of environmental management, such as waste management and coastal planning and protection. Marinas were also made eligible for the award.

In 1987 the Blue Flag was awarded to 244 beaches and 208 marinas in ten European countries.

In 2001 FEE became a global organisation and changed its name from FEEE to FEE (Foundation for Environmental Education). Since then, many organisations and authorities outside Europe wishing



for cooperation on spreading the Blue Flag Programme have made applications to FEE.

With the expansion of the program, the criteria have become more rigorous and unified. As of 2006 an international set of criteria is being used with some variation within to reflect the specific environmental conditions of certain regions

BEACH CRITERIA

To date, there are 3009 beaches and 639 marinas awarded the Blue Flag worldwide. Follow the links for detailed information on sites in each country.

ENVIRONMENTAL EDUCATION AND INFORMATION

Information about the Blue Flag must be displayed.

Environmental education activities must be offered and promoted to beach users.

Information about bathing water quality must be displayed.

Information relating to local eco-systems and environmental phenomena must be a code of conduct that reflects appropriate laws governing the use of the beach and surrounding areas must be displayed.

WATER QUALITY

The beach must fully comply with the water quality sampling and frequency requirements.

The beach must fully comply with the standards and requirements for water quality analysis.

No industrial, waste-water or sewage-related discharges should affect the beach area.

The beach must comply with the Blue Flag requirements for the microbiological parameter faecal coli bacteria (E.coli) and intestinal enterococci/streptococci.

The beach must comply with the Blue Flag requirements for physical and chemical parameters.

ENVIRONMENTAL MANAGEMENT

The local authority/beach operator should establish a beach management committee.

The local authority/beach operator must comply with all regulations affecting the location and operation of the beach.

The beach must be clean.

Algae vegetation or natural debris should be left on the beach.

Waste disposal bins/containers must be available at the beach in adequate numbers and they must be regularly maintained.

Facilities for the separation of recyclable waste materials should be available at the beach.

An adequate number of toilet or restroom facilities must be provided.



The toilet or restroom facilities must be kept clean.

The toilet or restroom facilities must have controlled sewage disposal.

There should be no unauthorised camping, driving or dumping of waste on the beach.

Access to the beach by dogs and other domestic animals must be strictly controlled.

All buildings and beach equipment must be properly maintained.

Coral reefs in the vicinity of the beach must be monitored.

A sustainable means of transportation should be promoted in the beach area.

SAFETY AND SERVICES

An adequate number of lifeguards and/or lifesaving equipment must be available at the beach.

First aid equipment must be available on the beach.

Emergency plans to cope with pollution risks must be in place.

There must be management of beach users and events to prevent conflicts and accidents.

There must be safety measures in place to protect beach users. displayed.

A map of the beach indicating different facilities must be displayed.

- A supply of drinking water should be available at the beach.
- At least one Blue Flag beach in each municipality must have wheelchair and accessibility features.
- Wheelchair access and accessibility features must be in place for at least one Blue Flag beach in each municipality.

The list with the Greek beaches awarded with a Blue Flag for 2011 was announced today, with Greece remaining in the second place worldwide with 387 beaches, 34 less than 2010. In Crete, the awarded beaches are 98, with Lassithi prefecture remaining first in Greece with 40 awarded beaches. The list of Crete this year had some additions, namely the beaches of Rodakino (Korakas), Adelianos Kambos, Pighianos Kambos and Skaleta.

ENERGY

There is much talk these days about Climate Change, Greenhouse Gases, alternative energy resources etc. Not to mention the cost of energy to the householder. This is a complex subject so we confine ourselves in this handbook to giving you a few

TIPS TO REDUCE YOUR ENERGY CONSUMPTION

LOWER THE THERMOSTAT

The biggest energy expense during winter months can be attributed to the heating of the house. You do not have to keep the thermostat on high at all times to feel warm and comfortable. Setting the thermostat at around 20°C will save you a considerable amount of



money. Wear warm clothing indoors, such as sweaters and socks. This will negate the effect of the lowered thermostat.

REDUCE AIR-CONDITIONER USAGE

In the summer, air conditioning can cause considerable expense and energy wastage. Try to avoid using the air conditioner exclusively. Try out other means of cooling down, such as a fan. Use cross ventilation to promote the flow of air in your home. Planting trees in the vicinity of your home can also help reduce heat buildup indoors.

REDUCE WATER USAGE

Reduce the time you spend in the shower. Use low flow taps and shower heads to reduce water wastage. When you brush your teeth or wash the dishes, make a point of turning the tap off.

UNPLUG APPLIANCES WHEN NOT IN USE

Appliances that are turned off but left plugged in consume energy in the form of standby power. Unplug appliances such as televisions or stereos, or use power strips to turn them off completely. Unplug all chargers that are not in use.

LOWER TEMPERATURE ON WATER HEATER

Lowering the temperature setting on the water heater saves you money and energy and also reduces the possibility of getting scalded by hot water. Avoid using warm water when washing dishes.

USE SCREEN OR CURTAINS TO IMPROVE INTERIOR COMFORT LEVELS

You can use screens and curtains very effectively during hot and cold weather. In winter, open the curtains during the day, to maximize the flow of sunlight, and close the curtains at night to lock in the heat. During summer, close the curtains during the warmer part of the day and open them at night to let in cool air.

WASH CLOTHES IN COLD WATER

Washing clothes in cold water can save you a sizable amount of energy, while giving you the same results as with the use of hot water.

MINIMIZE USE OF THE SPIN DRYER IN WARM WEATHER

In summer, hang dry clothes outdoors. This will reduce the need for the spin dryer, and let you save on energy as well.

REPLACE ALL GLOBE LIGHTS

Globe lights are highly inefficient means of lighting your home. Replace all these lights with low energy lighting to save more than half of the energy costs related to lighting.

CHECK BOILER AND VENTS

To maximize boiler efficiency, check the filter regularly and have it cleaned or replaced, as required. Ensure that the vents in your home are clean, so that you are assured of efficient heating or cooling.

INSULATE YOUR HOME

Make sure you have adequate insulation in your exterior walls, attic, and basements. If you already have insulation in your attic, consider adding an additional layer. Some older homes did not originally have insulation in their walls. If you can't remove your wall covering (drywall, plaster, etc.), consider having a contractor spray expanding foam insulation into the walls through a small opening. Spray foam can also be utilized in attics and underneath pier-and-beam homes.

INSTALL SOLAR WATER HEATER

If you have electric water heating, you could save a significant amount on your water heating costs by installing a solar water heater on your roof. Solar water heating is very efficient, and may be able to assist in offsetting your water heating costs. They even work on cloudy days, although less water heating occurs.

INSTALL DOUBLE INSULATED WINDOWS AND DOORS

It may be worth looking into replacing your older single-pane windows with efficient double-pane windows. Low-e coatings reduce solar gain if you have excess heating of the home by the sun.

REPLACE YOUR OLD WATER HEATER

If your water heater is 10 years old or older, consider replacing it with a new water heater. Today's water heaters have better insulating properties.

REPLACE YOUR OLD APPLIANCES

Many appliances, such as your refrigerator, washing machine, and dishwasher, are now much more energy efficient than they were 10 years ago. Look for the Energy designations A+ are the most efficient appliances. Replacing these old appliances could save you 50% or more of the energy used to run the old appliance.

ENSURE YOUR ATTIC BREATHE

If you have an attic in your home this can hot in the summertime. This heat transfers into your home. Correct ventilation of your attic brings in cooler outside air and replaces the hot air built up in the attic. Consider improving your attic's ventilation with a ridge vent. This type of venting can be retrofitted on existing roof ridges, and utilizes negative air pressure from wind to draw out hot air. Also, natural convection also forces hot air through the uppermost opening of the roof, a ridge vent. Another method is solar-powered roof vents.

SHADE YOUR AIR CONDITIONING UNIT

If you rely on your air conditioner to keep your home cool and comfortable when the temperature outside is hot. You can help your outside AC compressor by providing shading from the hot midday and afternoon sun. Consider planting a tall-growing bush by the outside AC unit where the sun hits. Be sure to allow space between the bush and the AC unit for air circulation and to service the unit.

REPLACE YOUR AIR CONDITIONING SYSTEM

If you have an air conditioning system that is 10 years old or older, consider replacing it with a newer, more efficient unit. If you can't afford to replace both the inside and the outside unit, consider replacing at least the outside unit, the compressor, which accounts for the bulk of the cooling costs. New compressor units will remove heat more efficiently than your older unit.

INSTALL CEILING FANS

Consider making use of ceiling fans in your rooms, particularly your bedrooms and living room. Ceiling fans move the air and make you feel several degrees cooler, which allows you to turn up your thermostat. They can also be reversed in the wintertime to move the warmer air near the ceiling down.

ENVIRONMENTAL EDUCATION

KEFALAS ENVIRONMENT CENTRE

This centre is unique in western Crete and provides a home for environmental studies and exploration for school children in the Apokoronas. The building was refurbished with European Community funds and is currently staffed by four enthusiastic professionals in environmental study. The funding for the maintenance of the building and staff is generously provided by the Apokoronas Municipality.

Thanks to the current economic climate, the centre seems to be in constant jeopardy of closing due to lack of funding for teachers by the Education Ministry in Athens.

RENEWABLE AND SUSTAINABLE ENERGY SYSTEMS LABORATORY (RESEL) - UNIVERSITY OF CHANIA

The Renewable and Sustainable Energy Systems Laboratory (ReSEL) covers a wide range of knowledge subjects in the fields of Applied Research and Technology Development for RES and RUE, Energy Planning and Sustainable Energy Management. Over the last few years ReSEL has developed research and project activities with an emphasis on critical insular issues. More specifically, ReSEL expertise focuses on:



Sustainable Energy Systems: Environmental Impact Assessment of Energy Systems, Renewables and environment, Renewables' project appraisal under uncertainty, Sustainable energy development, Analysis of the renewable energy sectors

Management of Renewable Energy and Energy Saving Systems: Regional/local energy planning, Sustainable management of natural sources, Technology Transfer, Life Cycle Assessment, Technical / Economic / Environmental Assessment

Biofuels: Exploitation of agrofood residues, Production of liquid biofuels, Biofuel heating of Buildings, Assessment of the technical and economically available potential

Sustainable Building and RES Integration: Building Integrated PVs, Phase Changing Materials, Design of active solar cooling systems, Technical and economic assessment

ReSEL's multidisciplinary team of specialised scientists and researchers possesses extensive experience and knowledge in the Renewable and Sustainable Energy field. The laboratory's projects are supported by the appropriate high-end facilities and technology tools. In addition, its members have developed expertise and accumulated a highly competent know-how in managing EU-funded projects (Intelligent Energy, Interreg, COST, etc) and national contracts.

ENVIRONMENT SUSTAINABILITY ACADEMY – Drapanos

The European Sustainability Academy (ESA) Drapanos, Crete opens its doors in March

About ESA

The European Sustainability Academy (ESA) operates from a beautiful, ecologically designed and constructed building located in a stunning ancient olive grove in Drapanos. Built in Forestry Stewardship Council (FSC) certified timber frame, straw-bales walls and handmade, sundried adobe bricks (mud bricks); the ESA building has been created as a globally unique, international management teaching and research centre. ESA provides training and development programmes for business managers, owners and leaders to learn about sustainable business and Corporate Social Responsibility (CSR).

The building, which includes a seminar hall and dining room both of which seat 50 people, has been designed by Chania architects Antonia Diamantaki and Zeta Chrissafakis and built



by local builder Antonis Nikoloudakis. ESA is located in a rural area which is off- grid, therefore, all energy requirements are supplied from the Cretan sunshine which is converted to energy through photovoltaic. The energy system has been designed and installed by Kostas Rovlias from Chania. For more details about the ESA building please see www.EuroSustainability.org.

In addition to the commercial objectives of business management training, ESA operates as a social enterprise which means that the building will also be made available to the community for meetings and events including art and music functions . The seminar hall will be offered to the village to use for free as a cinema, especially for the young local people.

An exciting collaboration between ESA and the Greek national scout movement (Proskopi) is producing environmental learning workshops for young people at ESA. Furthermore, ESA is delighted to have the support from Athens University of Economics and Business and from WWF (World Wildlife Fund) in Athens.

The Uniqueness of ESA Drapanos

There are many learning centres for CSR and sustainable business in the world, but very few are truly sustainable in every way. The few centres around the world that are holistically sustainable will be collaborators with ESA in the development of teaching and research around sustainable business.

ESA is a holistically sustainable enterprise which contributes positively to the local community and the ecological environment. It is a unique venture with nothing similar in Europe. The construction of the building has been an action learning and action research initiative from the start. Furthermore ESA is a holistically sustainable enterprise which contributes positively to the local community and the ecological environment. In current difficult economic times, ESA is already providing employment to the community, and providing business to the local cafes and hotels. ESA can also provide education to local people about the importance of conservation and sustainability for the long term health and well-being of Crete.



The Academy will be officially opened in March 2012. Everyone is welcome to join in the opening events, networking and informal inaugural seminars about the pressing sustainability issues for Greece and Europe. For information, **contact** **info@EuroSustainability.org**.

For a full version of this article see [www. EuroSustainability.org](http://www.EuroSustainability.org) / Publications

FOUNDATION FOR ENVIRONMENTAL EDUCATION

The Foundation for Environmental Education (FEE) is a non-government, non-profit organisation promoting sustainable development through environmental education. FEE is an international umbrella organisation with one national member organisation per country representing FEE on the national level and in charge of implementing FEE programmes nationally. FEE currently has 74 member organisations in 64 countries worldwide.

BOOKS

CRETAN LOCAL BOOKS

Apokoronas walks

by Geoff Needle

More Crete Walks in the Apokoronas

Geoff Needle wrote the books with the main purpose of getting more people out into some of the beautiful parts of the region in order for them to better appreciate how nice it is when you get away from the towns and villages.

The books are currently available locally at:

The Bookworm Bookshop, Vamos

The Peartree Minimarket, Almyrida

The Notos Bookshop, Chania

The Mediterraneo Bookshop, Chania

They also appear at local tabletop sales. They are available for purchase on the Amazon website where most are now getting sold and which has a number of favourable reviews. If the books were to be purchased in bulk direct from the book distributor then there would be a good profit for the seller as the author only gets a small fraction of the cost.

Walks Series

By Bob & Anna Scott

Book 1 – Five walks in the Plaka/Almyrida area

Book 2 – Five walks and an evening stroll in the Kalyves area

Book 3 – Five walks for motorists : the area between Kalyves and Stylos;

Tsivaras-Vamos-Douliaana-Tsivaras (but currently blocked!); Around Makheroi; Ancient Lappa, plane tree and tombs; Sellia and Sourì.

Book 4 – Special 10th Anniversary Edition: Where waters meet (Stylos area); Rivers

and Groves (around the Koiliaris river area); Almyrida-Douliaana-Almyrida; Around Vrysses; Vafes and Nippos.

Book 5 – Kokkino Horio-Koutalas-Faros-Kokkino Horio; Around Nippos; The

Nippos-Tzitzifes-Vafes Triangle; Nero Hori-Paidohori-Pemonia-Nero Hori; Ramni-Kares-Ramni.

Book 6 – Argiroupolis circuit; Fres circuit; Pemonia-Fres-Pemonia; Pemonia-

Melidoni-Pemonia; Neo Horio-Makheroi-Neo Horio; Evening stroll around Maza

This is a series of 6 booklets of walks in the Apokoronas area of Crete. Every walk is circular. Apart from photocopying costs, all of the money raised from the sale of the books goes to support the Sunshine School for Blind Children in Northwood Middlesex, England. The School is administered by the RNIB which is a Registered Charity – No. 226227. So far, Anna and Bob have sent a little over £6500 to the school.

Thank you to all who have bought the books and a reminder that they can be purchased from Chrysalis on the parade in Almyrida or direct from Anna and Bob (bobanann@otenet.gr) and cost €3 each – a price which has been maintained since the books were first published in 2002!

INTERNATIONAL BOOKS

The Rough Guide to the Energy Crisis

by David Buchan

The Rough Guide to Green Living

by Duncan Clark

Sustainable Energy without the Hot Air

by David McKay

Ten Technologies to Save the World

by Chris Goodall

How Bad are Bananas? The Carbon Footprint of Everything

by Mike Berners-Lee

POEMS

RECYCLING AND ALL THAT

Reproduced with kind permission from the author, Linda M Hughes, Brigham, Cumbria

Our newspaper on Saturdays is very, very keen
On aspects of recycling and all things Cool and Green;
It urges us on every hand to save and to conserve,
Reduce our carbon footprint – or we'll get what we deserve.
The newspaper I'm thinking of – and yours might be the same –
Should take some of its own advice and share a bit of blame.

No less than eighteen supplements – that's really not a few.
I'll try to tell you what they are – you tell me if it's true:
A supplement on *Cruising*, a *Pensions* explanation;
A *Bedding Booklet*, *TV Guide* for every mortal station,
There's *Sport* and *Golf* and *Money*; a *Motoring* review;
Then *Travelling* and *Holidays* – a *Weekend* paper too.
There's *Property* and *Arts & Books*, a glossy *Magazine*.
Advice on one's *Upholstery* and neatly tucked between
Is yet another *DVD* – away it will be cast!
And oh – I nearly missed it out-
The Newspaper at last.*

Three supplements will go next door
And three of them we'll read.
And all the rest go in the bin.
We really do not need
To chop down all these forests,
And mangle up the trees
To propagate such rubbish
And I wish they'd stop it – please!

**There was also a Gardening Supplement but I couldn't fit it in – and that makes 18.*



WORLDWATER DAY - 22nd March 2012

Reproduced with kind permission from the author, Linda M Hughes, Brigham, Cumbria

You've heard about "World Water Day"?

No? - Frankly, nor had I;

I thought that water just "*arrived*"
by falling from the sky.

Collected in a reservoir

or pumped up from a well;

and after we have used a bit

It goes – where? Who can tell?

But now it seems there's not enough

- you needn't look at me!

I'm *very* careful with each drop

as you will quickly see.

I rise up in the morning

and get the kettle hot;

then take a bath or shower, it

depends what time I've got.

I clean my teeth with running tap

because that's what I do,

and then, like everybody else

I go – and flush the loo.

I wash my hands – I've counted up -

at least five times a day,

and never really think about

the water swished away.

The cooking and the washing up;

the coffee and the tea!

It's really quite astonishing -

and this is only *me*.

Just *one* amongst the millions

all doing much the same.

And now, of course, I clearly see

that, yes, I am to blame.

So think about **WorldWater Day**

and use it with great care;

in case we wake up one fine day

and find it isn't there!

USEFUL PHONE NUMBERS

Vrysses town hall	28253 40309
For large rubbish items etc	28250 23220
Road lights	28250 83722
Water board, Burst pipes etc	28250 83722

VILLAGE LIAISON IF YOU CANNOT CONTACT OFFICIAL REP:

Drapanos - Joanne Shepherd	6946244163
Fres Kirsten Hedemann Mus	6942901987
Kefalas - Gill Pickering	6958891825
Kournas/Kastellos - Alyn Blyth	6982714331
Gavalohori - Pat Westwell	6944924215

Kalyves - Bill Calland	6978563364
Kokkino Horio - Liz Remnant	6955273231
Plaka/Kambia- Keith Hall	6942901987
Vrysses/Nippos/Vafes - John Eardley	6973818319
Vamos - Jim Beckett	6975929041
Helen Papadogianni	6944 131268

KEP OFFICES (CITIZEN'S ADVICE)

Asi Gonia	28250 71093
Fres	2825 071094
Georgiopolis	28250 - 61347
Kalyves	28250 83157
Vamos	28250 - 22235 – 37
Vrysses	28253 40308,

EMERGENCY NUMBERS

Police 24-hour Emergency Number (in English, French, Greek)	112
Police Emergency Number	100
Vamos Police station	28250 22218
Coast Guard	108

TOURIST POLICE NUMBERS

Chania	28210 53333
--------	-------------

FIRE

Fire Brigade	199
Forest (Fire) Department	191