

Buildings

Making buildings more sustainable plays a big part in many of the long-term action plans produced by the faiths, both in terms of existing structures and new constructions. Many of the faiths (such as the Patriarchate of Alexandria and All Africa) are launching audits of their properties and energy efficiency drives; some (such as the Armenian Apostolic Church) are installing renewable energy systems; and others are planning to build eco-friendly new churches, temples, education centres, monasteries and other institutions as inspiring examples of what can be done.

The Church of England is looking very intensely at its building stock as part of its very ambitious plan to reduce its carbon footprint by 80 per cent by 2050 and 42 per cent by 2020. As well as retrofitting church properties with insulation, energy saving light bulbs and more efficient heating systems, it's also looking at the suppliers of energy to those buildings. Likewise, the Quakers in Britain are taking their main conference centre 'off-grid' in two to three years' time.

The Church of Norway wants each of its parishes to act as an 'environmental lighthouses'. The Patriarchate of Alexandria and All Africa is building an environmental centre (using eco-friendly construction methods) to lead efforts in Africa; and the Shanghai Buddhists intend to make all Buddhist monasteries in China more environmentally friendly, creating a model of urban Buddhist ecological monasteries in Shanghai in the short term to inspire others around the country.

The New Psalmists Baptist Church in Baltimore, US, is making its new, US\$41 million edifice more energy efficient, including review of lighting, heating, materials and energy efficiency strategies, and the Church of South India is promoting the use of 'green fencing', using bamboo and vetiver instead of concrete compound walls around church properties and schools.

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Buddhists Shanghai

5. GREENING THE MONASTERIES

The aim is to make all Buddhist monasteries in China more environmentally friendly in the long term, and in the short term to create in Shanghai a model of urban Buddhist ecological monasteries to inspire others around the country. The idea is to use this experience to develop a guide or manuals for other urban monasteries. The first stage involves:

a) Increasing the “green” elements in the monastery to beautify the environment. Unlike the more famous “mountain area” monasteries, almost all the monasteries in Shanghai are built on flat land. Furthermore, land resources in Shanghai are extremely tight, and in most monasteries there is no spare ground that can be specifically devoted to tree vegetation. For this reason, Shanghai monasteries must develop local, achievable Green Strategies. For instance, such Green Strategies might involve increasing the numbers of flowers and potted plants inside the monastery grounds, to beautify the temple environment but also to freshen the air.

In the longer term, the Shanghai Jade Buddha Monastery could be used as a base to set up a “Buddhism and environmental education centre” specifically to provide training programmes for other urban Buddhist monasteries in China.

b) Adopting Green design in new monastic buildings. This will:

- * save energy:
- * maximise the use of natural light to reduce energy consumption,
- * use light-coloured roofs or green, grass-planted roofs, to cool down temperatures naturally in summer,
- * As far as possible, consider solar power as the supply for heating the monastery’s rooms and water in winter

Christian

Alexandria and all Africa

Each Metropolitan Archdiocese and Diocese is requested to undertake planning the implementation of projects on a local parish level and a wider diocesan level. Examples of these are:

- On a parish level:Saving on energy within ecclesiastical buildings through the necessary insulation and control of light.

- On a Diocesan level:Every Metropolitan Archdiocese and every Diocese of the Patriarchate of Alexandria should examine land use, the buildings and investments within its care or influence and make sure that they are used or they function in a way that is not detrimental to the environment, but actually improve it.

....The preparation of a complete proposal, the organisation of the Environmental Centre of the Patriarchate on privately owned land of 200 000 sq metres belonging to the Metropolitan Archdiocese of Johannesburg and Pretoria in South Africa.

This centre is to aim at creating sensitivity to relevant issues among the members of the Patriarchate in South Africa and the greater African society and other African lands. It is to organise seminars, education of leaders and the co-operation with other organisations on a local and an international level through relevant initiatives for the protection of the environment.

The building that is to host the centre is to be constructed along ecologically-friendly lines and is to serve as an example of buildings that conserve energy and make use of renewable sources of energy like solar power.

At the same time, efforts will be made to promote and display, in a specially prepared exhibition area, ecological projects and proposals from the industrial sector, that offer sources of energy from the sun, water and wind. The steady organization of an ecological Library and Research Centre will constitute a long-term aim, according to financial means and funding.

- Every Metropolis to encourage every Parish to carefully examine the use of land, buildings and what they are furnished with, in such a way as to make sure that these do not damage the environment, but rather promote its conservation.

Armenian Church

1) Creating green surroundings for the Churches: In 2009 this program kicked off on the territory of St Gregory the Illuminator Mother Church in Yerevan. It is the largest church in Armenia by size and was consecrated in 2001 during the 1700th anniversary of proclamation of Christianity as the state religion in Armenia. The Mother Church is located in the centre of the capital, surrounded by a number of public attractions and universities. The green area around the construction site had to be removed and, as a result, the territory has become ecologically spoilt.

Although the area surrounding the church is not managed by church itself, it was viewed as a poor policy and an anti-environmental urban planning example. Alternatively, the church parish members and visitors could rest under the shadows of the trees on the green mound whilst being shielded from dust and traffic pollution. Furthermore, this could be a place where the university students could enjoyably spend their free time and have spiritual food and ecological self-education. Last but not least, the neighbourhood will also benefit from this project, as public park areas are very limited in the capital as well as around the country in general.

The Mother Church has around 4.9 hectares of land plot, two hectares of which ought to be green. On the 1st of May 2009, a tree planting session was carried out. This notwithstanding, so much still needs to be done to implement the comprehensive green-design of the plot. The negotiations for securing finance have been initiated, looking to begin the project in the spring of 2010.

The most costly parts of the project are the preparation of the land plot (as the area is covered with construction waste and stones) and, owing to the dry climate in that region, that irrigation system must be installed. The preparatory works will be followed by tree and bush planting by volunteer students from surrounding Universities. The students from the Theology faculty will then take care of the area for the first three years so that the newly planted trees may become deeply rooted and sufficiently strong to survive. The success of this project will enable the group to ensure its expansion, and to include other Churches around the country.

2) Apart from the summer camps, the church has several guesthouses in the region, particularly in the Mother See of Holy Etchmiadzin and near the Haghpat Monastery. The Haghpat Monastery, along with the other monuments of that region, is one of the most visited sites in Armenia. In the future it is logical that it be included in the environmentally friendly tourism promotion project in Armenia, implemented by the church, which is currently in negotiation.

These ambitious plans are in conception stage and will require a lot of organisational and construction work. That said, it is already possible to take several steps in the right direction. The implementation of solar heating system in the above mentioned sites will allow the reduction of the operating costs of church occupied buildings and the promotion of resource conservation and eco-friendly management. The installation of a solar heating system in the guesthouse of the Mother See in Holy Etchmiadzin may be also seen as very important in the sense that it has visitors all year round, and so the initiative will contribute greatly to the advertisement of renewable energy resources in Armenia.

Presbyterian Church of Cameroon

1.1 Construct modern incinerators in all hospitals, health centres & institutions for proper waste disposal

- 1.1 Sensitise communities on location of latrines and wells in developing their land for habitation
- 1.2 Collaborate with Local Municipal administration in the location of burial grounds
- 1.3 Encourage urban development in communities that respect appropriate use of hills, rivers, wetlands and water sources
- 1.4 Advocate for building permits that show land use for domestic buildings e.g. waste disposal sites

Catholic Bishops' Conference of England and Wales

7. Assets

The buildings and land holdings associated with the Catholic Church of England and Wales could helpfully be the subject of environmental audits and sensitive rebuilding/renovation that takes concern for the natural world into account; for example, by implementing standards that require us to care about energy use, water, recycled materials, sustainable wood and other raw materials, and Catholic places of worship or administration should be beacons of good practice that inspire the local communities.

- Manage land associated with all Catholic buildings in an environmentally sensitive way.

- Make church grounds a manifestation of care for the earth so that they form part of, and celebrate, our understanding of our role in nature.

Many of our church grounds could be enhanced by planting wildlife friendly plants, shrubs and trees; each place of worship could become a haven for all of life and inspire the local community to follow our example.

Catholic Coalition on Climate Change

1. Assets: what are we doing to lower the carbon footprint of our facilities, protect church-owned land?
 - Facilities: The Coalition will partner with the U. government’s Environmental Protection Agency and their “ENERGY STAR” program. This program offers a variety of tools and techniques for individuals and institutions to reduce their energy use. In particular, we will seek their assistance to encourage our thousands of parishes, schools, hospitals, and other facilities to become certified as “ENERGY STAR” congregations or buildings.

Several dioceses are already beginning this process through the diocesan facilities managers.

With nearly 18,000 Catholic churches, 8,000 elementary and secondary schools, countless buildings housing charitable organizations and hospitals and health care facilities, the Catholic community can have a tremendous impact on the amount of energy we can save and reduce our carbon footprint.

- Catholic Facilities Managers: The Coalition has begun conversations with Catholic facilities managers to encourage a more comprehensive and green approach to renovating older buildings and making new structures as environmentally responsible as possible. Emphasis will be placed on the money saved with such practices but also ensure that even costly retrofitting or materials are consistent with God’s injunction to live in harmony with the gifts God has given.

As more Catholic churches and other Catholic facilities reduce their carbon footprint with conservation practices, the Coalition will encourage pastors, principals, and other executives to use this as a “teachable moment” for those who use these facilities.

The Coalition will work closely with Catholic conference staff at the state level to assist them in making the case for care of creation and the poor to state and local legislators. For example, the Catholic bishops of Texas recently asked the Coalition for advice and language for a public letter raising questions about the efficacy of building new coal-fired power plants.

Church of England

The Church of England's programme 'Shrinking the Footprint' rightly makes serious demands of the Church's people and assets. This document outlines how it will become even more ambitious. We must put our own house in good order, and connect our environmental action to our mission – communicating the Gospel of Christ and modelling his love for justice and peace.

Our churches, parsonages, schools, and halls produce as much carbon dioxide as a major UK store chain. The Carbon Trust and the Energy Saving Trust have been very helpful in the development of our work to shrink our 'carbon footprint'.

Action now required, first of all, is to reduce the energy use and carbon footprint of the Church's buildings and operations, and its consumption, both that of the Church as an institution, and that of individual members. Other programmes to reduce our wider ecological footprint will follow.

1. Specific commitments and programmes of action have already been undertaken by the Church of England and will continue over the next seven years. Shrinking the Footprint (StF), the Church's main programme of action on environment and climate change in relation to the whole of its buildings and estate, was established after the 'Sharing God's Planet' report in 2005, and began work in 2006. The scale of the task may be appreciated from the figures already gathered by StF as of 2007:

- 16,200 churches
- national carbon footprint for cathedrals, churches, houses and offices, 330,000 tonnes CO₂
- churches and halls account for about 65% of emissions = 212,000 tonnes approx.
The next largest segment of energy use and carbon footprint is clergy houses.

Including schools, the total is 1.1m tonnes.

2. StF focused to begin with on reducing carbon dioxide emissions from Church buildings and operations. It has set itself the goal of reducing the Church's overall carbon footprint by 80% by 2050. Initially, the target was set for a 60% reduction by 2050, in line with national policy. After debate in Parliament the national target was increased to 80% on the advice of the national Committee on Climate Change. It was accepted that the Church should follow suit, resulting in 'the 20% Church' in terms of its carbon footprint.

The 'Shrinking the Footprint Path' is set out on the comprehensive website set up for the programme and campaign (<http://www.shrinkingthefootprint.org>).... To enable

churches to move along this StF Path from energy assessment and savings to more ambitious projects and investments, the StF team commissioned a set of tools for guidance on energy management for churches, cathedrals, schools and clergy houses.

3. In addition, in 2008 the Church Commissioners put on record their aim to reduce carbon dioxide emissions from bishops' houses and offices (by 60% by 2050 – in line with the Government's then energy White Paper). The opportunity is taken to review each property during a vacancy when there is a change of bishop; following which upgrades of boilers, insulation and glazing for energy-saving and improved efficiency and affordability are carried out – 25% of the whole stock having so far been improved in this way.

Chelmsford Diocese is the home of the first designated „Eco-cathedral“ in the Church of England. The Diocese has an environment group with all areas represented, which is bidding for funding for youth initiatives, while encouraging parishes to reduce their carbon footprints and become Eco-congregations.

The Bishop of London chairs the Bishops' Environment Panel, and is National Chair of Shrinking the Footprint. Progress at diocesan level is overseen by a steering group, chaired by the Director of Property. In 2008, the Diocese appointed a full-time Head of Environmental Challenge. Environmental advice is on a diocesan micro-website at www.london.anglican.org/Shrinking-the-Footprint.

In 2007, the Diocese with then London Mayor Ken Livingstone and partners in the London Church Leaders' Group launched a booklet on running a greener church, 'For Creed and Creation'. A range of advice notes on aspects of Shrinking the Footprint is also on the website. ...

The Diocese's Climate Action Programme is now under way: www.london.anglican.org/Shrinking-the-Footprint-Climate-Action-Programme. It has three strands: grant-aided audits of energy, carbon, water and waste, starting with churches in the West End and City; 'Generic Building Solutions', in partnership with the Carbon Trust; and a scheme of benchmarking to calibrate energy saving targets across the Diocese's 479 churches, which comprise a very diverse range from medieval to the 20th c, all periods between being strongly represented.

Generic Building Solutions, announced at the Lambeth Palace Day in June 2009, will sample 20 churches in four archdeaconries, to identify typical measures for energy saving but tailored to varying buildings, patterns of use and new technologies. The aim is to find solutions applicable to churches of particular types and ages wherever they are, yielding carbon reductions up to and beyond the 80% target for 2050. Solutions

reached may call for radical change. Listed building implications will be addressed before applying to particular schemes. English Heritage and the Diocesan Advisory Committee for the Care of Churches (DAC) are being consulted.

- In Lichfield Diocese the Church of St Alkmund's in Shrewsbury has installed solar panels on the roof, with a smart display system to show how much energy is being produced and what carbon emission savings are being made.
- Solar panels have also been installed and are in operation, on the lead roof of Grade 1 listed St Denys's Church in Sleaford, Lincoln Diocese. The panels are fixed to a frame with special non-intrusive clamps.
- In London diocese, several churches have introduced renewable energy systems. Solar power is in use at St James's Piccadilly, St Mary's Spring Grove and St Aldhelm's Edmonton. St Stephen's Walbrook has a new energy-saving lighting system. Planning permission and faculties (the Church's equivalent of listed building consent) are being sought for further projects. Permissions have been gained by St Silas Pentonville, in the course of their roof replacement project, for re-covering the south face of the roof with solar photovoltaic imitation slates, the first Church in the UK to gain permission for such a project.
- A number of other churches – including St James's Piccadilly and St John's Wood Church – have a track- record of environmental auditing and mitigation, the former going back to an auditing scheme in London and Southwark during the 1990s.
- In Southwark, St Alban's Church, Streatham is using 18 solar panels to help power its buildings. This was a multi-partner project funded by EDF Energy's Green Fund and the Government's Low Carbon Building programme, with support from the consultancy Creative Environmental Networks. It followed a full energy audit of the church. St Alban's was the second church in the Diocese to go for solar power, following the pioneering work of St Peter's, Brockley, in 2006.

- St Mary's Church, Addington is an award-winning 'eco-church' that has developed numerous environmental projects, and is acting as a hub via its local Churches Together ecumenical network, to encourage other churches to carry out environmental audits and become more active in environmental work.

Continued core activity with further action to measure, monitor and reduce the carbon footprint of the Church's total building stock. This work needs to be urgently completed in dioceses where so far it has just commenced or has yet to begin. The StF team will continue to support all dioceses and parishes in taking these first steps, then continuing to follow the 'Shrinking the Footprint Path', using the toolkits for energy management in the Church's total stock of buildings.

In the wake of the new strategic plan, the Shrinking the Footprint team will draw up a route-map, costed in outline, for the programme over the next seven years and beyond.

The route-map should:

- Outline development of a StF Sustainable Procurement System for consumables and other goods and services, and a Code for Sustainable Churches for management, maintenance, building and reordering works.
- ...
- The Code for Sustainable Churches should draw on diocesan experience particularly in Exeter, London, Newcastle and Durham, on the experience of professional advice on low-carbon design, on the Green Building Standards of the National Trust and Building Research Establishment (BRE), other agencies in sustainable building such as the Green Building Council and the 'One Planet Products' service pioneered by BioRegional. It would bring together standards, guidance, case studies, assessment tools and other resources covering aspects of sustainable construction applicable to church buildings.

New challenges

- Churches and their buildings not yet audited should be professionally measured for their performance in energy use, emissions, water and waste disposal either individually or generically, and reports issued on management efficiencies and low cost improvements, by 2012.
- In the light of local successes in going 'carbon-neutral' in offices and other buildings, dioceses and cathedrals will be encouraged to set targets for genuine net carbon-neutral status (to be defined in accordance with government guidelines) in at least one building, such as the diocesan HQ, or a class of buildings, such as new or refurbished houses. This should be achieved by 2016, which is also the date set for all new houses in the UK to be built to net zero-carbon standard.

The Code for Sustainable Churches should draw on diocesan experience particularly in Exeter, London, Newcastle and Durham, on the experience of professional advice on low-carbon design, on the Green Building Standards of the National Trust and Building Research Establishment (BRE), other agencies in sustainable building such as the Green Building Council and the 'One Planet Products' service pioneered by BioRegional. It would bring together standards, guidance, case studies, assessment tools and other resources covering aspects of sustainable construction applicable to church buildings.

Church of South India

Conduct a thorough audit of the energy use in your church buildings and programs. Look for ways that energy can be saved. Turn off lights, fans, and air conditioners when not in use.

5. Eco-friendly buildings

Eco-friendly buildings are the latest trend in India. Companies are using recycled materials to erect structures. Air conditioners are being fitted with intelligent sensors to regulate cooling according to the number of people in the room. The Government should promote green buildings.

2. Green Fencing: Instead of concrete compound walls that consume loads of cement and brick, not to mention steel (all huge carbon emitters) there is a rising trend of growing fences through cultivating bamboo and vetiver instead. They are far more eco-friendly and act as great sinks for carbon. Hence we promote the use of bamboo and vetiver in fencing of Churches and of School campuses.

Franciscans

Encourage Franciscans to establish local teams which can serve as auditors for buildings and other assets

Ecological management of buildings and other assets is vitally important. The family can learn from and build upon the success of projects already underway such as the environmental assessment of Franciscan Renewal Centre in Arizona and in the Franciscan centre in Graz in Austria.

Jesuits

1. Faith-consistent Use of Assets

We will run our retreat centres in an ecologically sensitive way, sourcing food as much as possible from local, organic, fair-trade sources and making sure that the buildings are audited according to local eco-standards. This will benefit nature as well as the retreatants who often are eager to experience God in nature while on retreat.

We will seek to inspire the next generation to commit themselves to protect the environment. We shall do this not only through our teaching and research but also by making our university, school buildings and grounds environmentally friendly.

Sankt Georgen Graduate School of Philosophy and Theology in Frankfurt, Germany, consists of a seminary, a university and a community house for JesuitsSolar plants are employed in the seminary building.

New Psalmist Baptist Church

Activities:

....Development of options to make our new, US\$41 million edifice more energy efficient, including review of lighting, heating, materials and energy efficiency strategies.
....Conduct of energy audits in the homes of individual parishioners in conjunction with the local energy supplier in Maryland

NPBC's new edifice will showcase a café that will provide services to families throughout the community. It is our intent to provide a wide range of products that are made with organic and free range products.

Polish Orthodox

Practical actions in this key area should include:

- a) Possibility of installation of local sewage treatment plant considered before construction of a new parish facility;

Lutheran Church of Tanzania

To popularize non-wood based construction material. Identify the building materials - Promote non-wood building materials

To advocate for orderly excavation of clay for brick making, and mining of granite for construction.-Examine existing procedures. - Convince local/village govt to regulate and Monitor adherence.

Daoist

a. Land and Building

Traditional Daoist temples have always paid strong attention to the harmonious relationship between buildings and their surroundings. This is to reflect the Daoist thinking about following Nature and returning to lives of simplicity and truth. In doing so, the result has been that the beautiful natural surroundings of Daoist places are protected and also that the purity and sacredness of the temples have been highlighted. This is the foundation of good feng shui, the traditional Chinese geomancy, which gives people a sense that Daoist temples are born from both heaven and earth.

Based on these ideas, we will restore and repair religious and environment-related facilities on land that is owned and used by Daoist temples so as not to destroy the existing surroundings. From 2010 to 2012 we will draw up an overall action plan and from 2013 to 2017 we will promote the experiences we have learned all across the country. The environmental facilities include: ritual facilities, education facilities, living facilities, recycling facilities and environment-related media facilities.

In future, any newly registered and opened Daoist temples should follow this overall environmental construction plan.

From ancient times, Chinese Daoism has always put a great emphasis on Dao following nature. It pays a great attention to the harmony and balance of heaven, earth and humanity, and the balance between Yin and Yang.... Daoist community, Daoist organisations, and Daoist temples should all carry on such great ecological traditions and should make positive contributions towards the construction of Daoist Ecology Temples, in both spiritual and practical ways.

Currently, all Daoist temples have made environment-related regulations, but they are not yet ideal. From 2010 onwards, we will gradually make more systematic regulations and by 2017 we hope that all Daoist temples in inland China will have completed this, and that systematic ecology regulations will be in place to give Daoist followers, and other visitors to the temples, a strong awareness of ecology tourism in context.

d. Alliance of Ecology and Healthcare

In the Qinling Declaration, published in 2006 at the first Daoist ecology and education workshop on the sacred mountain of Taibaishan in Shaanxi Province, there was a goal to construct environmentally friendly Daoist temples. The China Daoist Association will help Daoist temples to form an Alliance of Ecology Temples, and combine this with an Alliance of Daoist Healthcare to promote the new ideas of the connection between an ecologically friendly and a healthy lifestyle.

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Hindu

Energy Efficiency Pack and Building Survey Pack

As the Hindu diaspora increases, so too does its number of places of worship. It is important, therefore, that these buildings are constructed and maintained in an environmentally-friendly manner.

To achieve this, an Energy Efficiency Pack will be created. Researched and developed by a core group, the Pack will help temples of all sizes to reduce their carbon footprint. The Pack will give information ranging from the importance of and financial incentives for energy efficient light bulbs to recommended suppliers of solar panels. Added to this, a

Building survey pack will also be created.

This pack, developed by the same group, will contain guidelines and standards for the construction of new buildings. It will provide information on how to make best use of current technologies and standards. We believe that if care of the environment is central to the construction of a new temple, the same level of care can remain during the life of the temple and its community.

An interim version of both packs will be developed within the first year and finalised in the second. The effectiveness of the packs will be monitored and updated with changes in best practice. The updated packs will subsequently be released in year four and year seven.

Jewish

Traditional Jewish communities have always been compactly organized. The prohibition against traveling and walking more than 2000 amot (about 1000 meters) beyond the city limits on Shabbat makes it essential for observant Jews to live within walking distance of key institutions: school, synagogue, mikveh (ritual bath) etc. This is a powerful model for the New Urbanism which seeks to build compact, green, walkable cities to reduce suburban sprawl and emissions from transport.

What We Have: Jewish Assets

Jewish communities around the world own and operate a large network of buildings, campuses, business and institutions outside of Israel. Within Israel, we are responsible for the planning and management of cities, forests, and a system of agriculture. The Jewish communities also manage and invest significant sums of money for charities and investment funds. Together, the facilities and investment funds represent some of the Jewish Assets addressed in this plan.

Cities are the physical assets that have the greatest environmental impact worldwide. According to some studies, urban design and architecture can determine up to 70% of a country's greenhouse gas, deriving from the key components of buildings, electricity use and transport systems.

It is estimated that by 2050, 80% of the world's population will live in cities. Building high density, low impact, climate- friendly urban environments is therefore of crucial importance for averting climate change and fostering sustainability.

As a Jewish country that is home to cutting-edge building and energy technologies, Israel has the potential to develop world-leading green cities that can set a global

standard for sustainability. Furthermore, Jewish tradition contains profound wisdom about urban planning that can inform this process. For example, the biblical requirement (Numbers 35: 1-5) that cities be surrounded by green belts (which inspired the garden suburb movement in the 1920's.)

Jerusalem, in particular, presents an extraordinary opportunity. As a city that is holy to three major world religions with more than 3 billion adherents, the symbolic significance of Jerusalem is huge. Establishing Jerusalem as a model green city is a feasible goal that could have a huge impact on sustainable urban planning world wide.

Where We Are: What is going on in the Jewish community now

With the support of programs like the Jewish Greening Fellowship, Jewish agencies are taking the lead in modeling meaningful Jewish responses to global climate change. Twenty JCCs and camps in the New York region are undergoing energy audits of their facilities, instituting green teams, implementing energy efficiency upgrades, greening their operations and providing innovative programs for their constituents to teach them what they can do to make a difference.

The city of Jerusalem, under the leadership of Mayor Nir Barkat and Deputy Mayor Naomi Tsur, has placed greening the city at the top of its list of priorities. There are plans for developing five new urban parks, an extensive light railway system (under construction), major development of green roofs, a proliferation of urban gardens, and integration of environmental concerns into the education system at all levels.

Arad, a city in the Negev desert also presents an immense opportunity. Arad is the future home to Israel's largest solar energy park offering the potential to supply a portion of clean energy needed to power a medium to large scale eco-city. It is the second largest municipal landsite in Israel, most of which is undeveloped. With incentives in the form of government subsidies for developing the Negev, some of the cleanest air in the world it has become a focus for plans to build a model eco-city with planning, energy, water and transport systems that can serve as a template for building sustainable cities in a variety of different environments and climates worldwide.

Jewish buildings improve energy efficiency, buy renewable energy wherever possible, and offset the remaining footprint.

While Israel has enacted legally binding criterion for insulation in construction, compliance is notoriously inadequate. A voluntary green building standard should be toughened and made mandatory for all new buildings. Existing homes need be

redesigned, with small grants and tax credits provided to expedite the transition. Energy efficiency standards need to be adopted and enforced for all household appliances with awards granted to public institutions and municipalities who show particularly conspicuous success. Municipalities and other public institutions should be required to submit detailed plans of progress.

In Jerusalem:

1. Jerusalem will be recognized as a world-leading green city by 2015.
2. Jerusalem's Jewish, Christian and Muslim residents will work together to develop the next stage of the city's green development program.

In Arad:

1. Building a team of city designers, water transport, land use and energy experts around the Arad "Desert Greens" project.
2. Developing a plan and detailed designs with the goal of begin construction of the Arad eco- city by September 2015.

Muslim

" Promote compact development and transit/pedestrian development and other "smart growth" measures to encourage local communities to consider the energy impacts of development and infrastructure construction.

Shinto

Introduction

This indigenous Japanese faith has approximately 90 million members with 81,000 Shinto shrines throughout the country. These shrines are built largely of wood and form the heart of the villages and local communities of Japan. Often the only extensive areas where trees and greenery flourish in Japanese cities and towns are around holy shrines.

Shintos see themselves as protected by creation. It is the forests and not the buildings that mark the true shrines of Shintoism. The deities are invited to these forests, where

they and their environment are protected by the local community, which in turn is protected by the deities. The Shinto plan reflects this theology.

In 2014, the Executive Group will meet in Japan for the Ise Event where an agreed International Religious Forestry Standard will be launched at the most sacred event in Japanese religious and social life: the rebuilding of the Grand Shrines at Ise. The Jinja Honcho will host all the major forest owning religions at the grand ceremony for the rebuilding of the Great Shrines of Ise.

The Ise Grand Shrines are unique because, in addition to some 5,500 hectares of sacred forest, they are also surrounded by a vast area of forest covering the nearby mountains. These were created to meet the needs of the shrines for timber – with most shrines being replaced every 20-25 years – and a farm to provide food to feed staff and provide offerings to the kami.

Together, they comprise a total ecosystem, linking the forests with the river-system, all the way to the sea. It therefore represents the most explicit and advanced example of the Shinto approach to Nature in general, and forest management in particular.