



# GREEN JERUSALEM

*A sustainable future ...  
for an ancient city!*

"ירושלים הרים סביב לה... מעתה ועד עולם." תהילים קכ"ה, ב'  
 "Jerusalem, a city surrounded by hills... for present and future generations." Psalms 125, 2

**By Helene Roumani** | In collaboration with Naomi Tsur | Second Edition, March 2012



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Jerusalem Municipality



## Jerusalem - A Healthy and Sustainable City

The Jerusalem Municipality, under its new leadership, has reaffirmed Jerusalem's membership of the ICLEI (Local Governments for Sustainability) global network of cities. Inherent in our renewed membership is a firm commitment to ICLEI's goals, based on the premise that cities around the world can together play a significant, if not decisive role in combating climate change and addressing global environmental challenges.

Unsustainable patterns of urban development are making cities focal points for emerging environmental health hazards. Jerusalem identifies with and abides by the Healthy City Criteria which require monitoring and improving our urban environment. A healthy city is democratic, accessible, safe, green, clean, sustainable, a good place for residents to live in that cares for all sectors of the population, promoting transparency and public engagement.

In 2010, Jerusalem qualified to join Phase 5 of the WHO (World Health Organization) Network of Healthy Cities, of which it had been a founding member in the 1980's. The city's leadership has committed to taking system-wide action for health development by creating innovative strategies and policies to assure a healthy quality of life and sustainable future for all its citizens.

Jerusalem is taking bold steps to improve its footprint, first and foremost through the new City Master Plan (currently in the final stages of approval); secondly through assessment and implementation of new measures and legislation to reduce carbon emissions, and thirdly through partnerships working together with government, business and NGO initiatives throughout the city.

The current administration, voted into office in November 2008, has defined as a strategic goal the promotion of mechanisms for participatory democracy and transparency of process. We are encouraging collaborative projects that bring academic institutions, NGO's, government ministries and the business sector together.

Jerusalem has entered into additional international partnerships, such as ICLEI LAB, focusing on the integration of urban nature and biodiversity management in the city's strategic planning. Another innovative framework is the recently launched Green Pilgrimage Network (GPN), which seeks to engage faith communities to ensure that pilgrims of all faiths "leave a positive footprint". The GPN enables Jerusalem to harness its unique spiritual heritage to the cause of global sustainability.

Some of the projects currently underway in Jerusalem, helping to make our capital city more sustainable, are presented in the accompanying pages.

As Deputy Mayor for Planning and Environment, I will be seeking opportunities for Jerusalem to work with other cities in the different global networks, as we strive towards a more sustainable urban environment.

**Naomi Tsur**

Deputy Mayor

Planning and Environment



# The Jerusalem City Master Plan

The City of Jerusalem is a unique capital comprised of a multitude of different communities, ethnic groups and religions, spread over diverse neighborhoods, old and new, ancient and modern, reflecting both eastern and western cultures, all weaving together an intricately complex human and urban tapestry. Few cities in the world can boast the multi-faceted and sensitive cultural fabric that is Jerusalem. Sustainable development in Jerusalem must respect this mosaic of life, and act to improve the ties between different groups, in an effort to foster social justice through the provision of equal opportunities for communal and economic growth in all sectors of the population. Planning for the future of this distinctive city is an extremely complicated task. Jerusalem has invested more than a decade of work on a new master plan. Based on principles of sustainable urban development, with the input of numerous stakeholders, the new master plan includes provisions to prevent urban sprawl with regulated guidelines for densification. In addition, new sustainability measures are included which stipulate standards for green building construction aimed at reducing carbon emissions and promoting the development of ecologically sound facilities for waste management and water recycling. These principles, along with the plan's emphasis on securing the status of open spaces and planning for the provision of affordable housing for young families, will help to assure a sustainable future for all of Jerusalem's residents. Although the plan has not reached final approval yet, it provides sustainable urban planning guidelines at both the local and regional levels.



Photos: Courtesy of SPNI

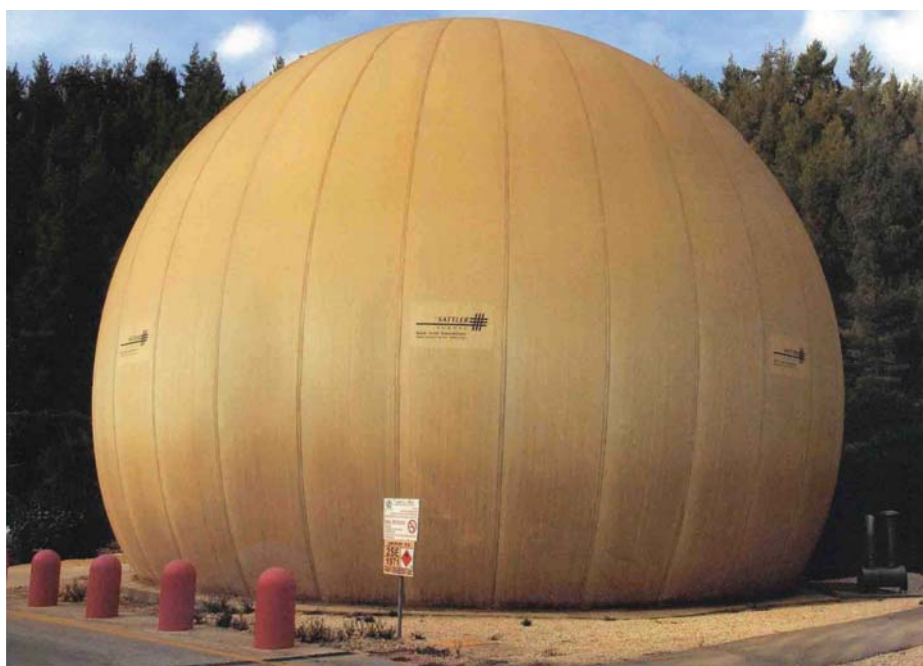




# Wastewater Treatment and Renewable Energy

Jerusalem is proud to be a member of the ICLEI global network (Local Governments for Sustainability), and is also one of 18 Israeli cities that have committed to reduce polluting emissions in accordance with the Kyoto Protocols. Within this framework Jerusalem is taking bold steps to reduce CO<sub>2</sub> emissions by 20% by 2020. Subsequent to approval of the Clean Air Act (which came into effect in January, 2011), Jerusalem has undertaken a review of its transport policy, adding the component of air pollution to traffic planning. These commitments have directly influenced the development of breakthrough local scientific and entrepreneurial initiatives in renewable and alternative energy technologies, such as harvesting solar energy and reclaiming energy from waste. The GIHON, the largest local water company in Israel, engages in the regular supply of high quality drinkable water to Jerusalem's 840,000 residents, business and industrial facilities. It is responsible for the development, expansion, operation and maintenance of water, sewage and drainage networks in the city, the construction of pumping stations and pressure management installations. The company conducts strict inspections on water quality and assesses water consumption. Its subsidiary, MAVTI (Jerusalem

Wastewater and Purification Enterprises, Ltd.), treats 40,000,000 cubic meters of wastewater a year in two purification plants, using advanced purification techniques enabling wastewater usage in agriculture. In the purification process, methane gas, emitted from sludge provides fuel to operate the plant, while surplus energy produced is fed back into the electrical grid. In addition, the company uses sludge to produce fertilizer, reducing the need for processing chemical fertilizers. The company is currently in the process of constructing an additional wastewater treatment plant in the southern part of the city that will use state-of-the-art membrane method technology (MBR) to produce high quality treated effluent for irrigating local public parks and gardens, including the new metropolitan parks around the city. New regulations in Israel encourage institutions and individuals to install solar roofs and to sell the energy generated back to the electric company at a very good price. The City of Jerusalem has taken advantage of this mechanism to install 100 solar roofs on schools throughout the city. The school children learn to monitor the energy production and benefit from an educational program funded from the profit of the electricity generated.



Photos: Courtesy of Hagihon

# Jerusalem Public Transport System

Jerusalem is well on the road to developing a state-of-the-art efficient and sustainable public transport system. The first line of the Jerusalem Light Rail began operating in August 2011, on a 14 km route, with 46 coaches, 23 stations, 3 major park-and-ride lots, and a sophisticated ticketing and control infrastructure. Incorporating designated lanes for high-grade eco-friendly "feeder" busses, the project has relieved traffic congestion and helped reduce noise and air-pollution, while stimulating rehabilitation, renewal and preservation of the historic downtown area. A second mass transit BRT (Bus Rapid Transport) corridor traverses the city, intersecting with the Light Rail (LRT) route at the City Center. The Light Rail is a major component in the overall systematic solution to the city's current transportation issues. The system combines public transport, private vehicles, pedestrian walks, bicycle paths, "park-and-ride" facilities, and a network of arterial lanes, with a technologically advanced multi-modal transport infrastructure that gives distinct priority to pedestrian and public transport over private cars. Convenient, accessible, easy to use, the LRT provides a capacity of up to 120,000 passenger rides daily. Along the route, the Light Rail serves all the populations of Jerusalem including Arab neighborhoods

such as Shuafat and Beit Hanina in the north, and the Damascus Gate, where it intersects with the buses that serve East Jerusalem. As the public adjusts to the new system, there will be a significant reduction in the use of private cars, alongside the lowering of carbon emissions and air pollution. Regular monitoring shows that pollution levels in Jaffa Road have already dropped considerably. Concomitant with the construction of the LRT, the city has carried out a series of extensive urban planning projects to redesign and upgrade the public domain in all the neighborhoods which the train traverses. Special investment in the downtown area has restored historic charm, introduced thousands of trees, and upgraded the streetscape. New pedestrian malls have been paved, alleyways gentrified, and landmark buildings retrofitted. Working in cooperation with different public interest groups and EDEN - the Jerusalem City Center Development Corporation - the Light Rail will strive to generate sustainable commercial, cultural and entertainment opportunities for residents of the city and visitors alike. Extension of the First Line is currently underway to link the system with Hadassah Hospital in the south and additional neighborhoods in the north. Plans are also underway to connect the city's two university campuses.



Photo: JTMT - Jerusalem Transportation Masterplan Team





# Separation of Solid Waste and Recycling

While recycling in Jerusalem is still in its early stages of development, the city is now embarking on a campaign to improve waste management infrastructure. In 2009, the city established a Municipal Recycling and Waste Separation Center. This facility was designed to collect and sort household refuse with the intention of significantly reducing and recycling solid waste. It enables separation of organic and non-organic waste, sorting of recyclable waste such as plastics, metal, glass, paper and cardboard, clothes, books, old furniture, as well as electronic waste. Batteries and other hazardous waste are collected separately. This important initiative has triggered the promotion of sustainable economic initiatives. Materials sorted at the recycling center are collected by companies that process them into new consumer goods. In addition, the center operates as an educational facility offering learning programs to

schools and community centers, and to the public at large, aiming to promote environmental awareness and healthy sustainable living habits. In 2011, two dozen mini-recycling centers were placed throughout the city. This has promoted an increase in recycling from 4% in 2009 to 15% in 2011. In cooperation with the Ministry of Environment, Jerusalem is in the process of closing down the poorly managed city dump in Abu Dis. The resulting high cost of dumping will oblige Jerusalem to ensure an annual increase of 5% in recycling. At this time plans are underway for a sophisticated sorting center for the treatment of waste that has not been separated at source. Educational programs encourage residents to recycle, and the city's economic advisors are examining mechanisms for rewarding residents who recycle diligently, while penalizing those who don't.



Photos: Courtesy of Jerusalem Municipality

# Jerusalem LAB - Local Action for Biodiversity

In October 2009, Jerusalem joined the international LAB (Local Action for Biodiversity) Network, a global urban biodiversity program coordinated by ICLEI (Local Governments for Sustainability) for the efficient management and conservation of biodiversity at the local level. In this context, a Forum of Stakeholders representing different municipal departments, government ministries, park authorities, and public interest groups, conducts round-table discussions on a regular basis to promote awareness and foster cooperation for comprehensive and effective local biodiversity policy-making and management. An additional goal of LAB is leveraging biodiversity conservation for social, cultural and economic development. Since becoming a member of LAB, Jerusalem has committed to a series of action and delivery plans based on a guided, three year program. In this context, Jerusalem has approved going forward with the establishment of a strategic master plan for urban nature (LBSAP - Local Biodiversity Strategy and Action Plan). The primary goals of the plan include integration of urban open spaces into the city fabric through connectivity and accessibility, rehabilitation and restoration of ecological corridors, and formulation of an efficient management system for the city's natural infrastructure. Once completed and approved, the plan will serve as an official statutory tool, empowering the Municipality to enact local biodiversity conservation measures. In addition, plans are being developed for the restoration of several key nature sites in the city, including three major initiatives within the first three years of the program - the Gazelle Valley Urban Nature Wildlife Park Planning Program (Jerusalem LAB's Legacy Project), the Wildflower Sanctuary, and the Railway Park. As a LAB Member, Jerusalem plays a prominent role in the LAB Phase Two global partnership program alongside more than 21 cities such as Cape Town, Durban, Seoul, Sao Paulo, Nagoya, Amsterdam, and Curitiba, for the promotion of good practice in local biodiversity management and sustainable urban development.



Courtesy of Jerusalem LAB. Photos: Yossi Zamir; Amir Balaban, SPNI



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# Urban Biodiversity

Biodiversity - the variety of life on Earth - refers to all the species on our planet, from the smallest microbe to the largest tree, and how they interact with one another. Urban biodiversity is an essential element in sustainable development, and must not be perceived as an obstacle to growth. The preservation of urban biodiversity is a way to enhance and improve the quality of life for city dwellers through contact with, appreciation of, and involvement in urban nature. Urban biodiversity is now considered by experts to play an essential role in global ecosystem continuity, sustainability, and ultimately human survival on Earth. It is not just about the loss of exotic species and conservation, but rather, about the vital resources which underpin the wealth, the health and wellbeing of us all. 2011-2020 have been designated as the UN Decade on Biodiversity. The UN has warned that biodiversity loss is a "wake-up call" for all governments. UN Secretary-General Ban Ki-moon stated that, "Biodiversity is life, biodiversity is our life!" - a message to all that humanity will suffer if we continue to lose our biodiversity at the rapid rate we are experiencing at present.

Jerusalem is proud to be a member of ICLEI. By joining the LAB Program, Jerusalem has committed to playing an active role in assuring that sustainable policies are developed at the municipal level, in order to preserve precious local nature sites and reduce threats to urban biodiversity.



Photos Courtesy of Amir Balaban; SPNI



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# The Jerusalem Green Map

Green maps illuminate the inter-connections between society, nature and the built environment. The goal of the Jerusalem Green Map is to engage the public and visitors to the city, in the urban environment. A member of the International Green Map Network [www.greenmap.org](http://www.greenmap.org), the Jerusalem Green Map [www.greenmap.org.il](http://www.greenmap.org.il) is an on-line interactive tool that identifies environmentally friendly accommodations, green spaces, parks, pedestrian trails, walking tours and more in and around the city. It charts the natural and cultural environment and highlights green living resources which may not appear on ordinary maps. Alternative tourism and eco-tourism are the fastest growing segments in world travel today. Website and map users have the opportunity to tour parks and gardens, shop at green businesses, and learn about the culture and history of Jerusalem. Furthermore, the Jerusalem Green Map allows residents and visitors alike to improve and preserve the city's environmental quality by becoming aware of how to enjoy its attractions in a sustainable, ecologically correct manner. Using the International Green Map icons and technology, local green map teams can share information, experiences, and monitor the development of green maps around the world. The Jerusalem Green Map was initiated by the Society for the Protection of Nature in Israel (SPNI) and the Ministry of the Environment in 2005 and has since developed and been recognized as an important environmental medium for the community.

Courtesy of SPNI



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# Community Gardens

In the spirit of Sustainable Jerusalem, the city, together with the Society for the Protection of Nature (SPNI), the Community Centers in Jerusalem and with the help of the Jerusalem Foundation, has turned 40 derelict plots, many in low-income neighborhoods, into beautiful and productive community gardens. With the help of trained guides, each garden is planned, established and cared for by the residents themselves to meet the needs of their specific community. Residents acquire skills in soil improvement and composting, methods of saving and recycling water, growing vegetables and complementary planting, and how to improve their local environment by keeping the area around the sites clean. In cases where a school adopts the project, students will have their own “edible garden” integrated into the annual curriculum. The gardening itself teaches the value of healthy food, the process of growing it and the cycle of the seasons. In an urban context, in which children meet food neatly packaged in the supermarket, community gardens enable residents to produce some of their food locally and to understand the negative impact of transporting food long-distance. Jerusalem Community Gardens have been selected as the optimal sites for locating the city's new mini-recycling centers, where dry waste from the garden meets with domestic organic waste to produce top-quality compost. The recent boom in urban development in Jerusalem has intensified the need for the maintenance of public open spaces as vital amenities for improving the quality of life and assuring the health of local inhabitants. In addition, the project supports and promotes constructive community values, where families and individuals living in the same neighborhood meet and work together to produce positive change. Promoting environmental conservation and sustainability, the Community Gardens Project offers pro-active solutions to the stress of urban living while fostering cooperation among Jerusalem's diverse multi-cultural populations.



Photos: Courtesy of SPNI





# Urban Nature Sites

Urban nature is considered an important factor in monitoring urban sustainability and creating an ecologically sound balance between the built-up and natural open environments. Jerusalem is committed to preserving and developing nature resources in the city and to creating quality open spaces for its residents to enjoy healthy outdoor recreational activities. Local parks and nature reserves provide habitats for indigenous plants and wildlife, while serving as vital resources for health, education, nature appreciation, and sustainable tourism. In cooperation with government institutions, the Society for the Protection of Nature in Israel, and active civil society participation, Jerusalem has successfully implemented a series of local urban nature initiatives in recent years. Of particular note is the publication of the Jerusalem Urban Nature Survey, the first of its kind in Israel, documenting 150 significant local nature sites, and the official designation of 40 of these sites for preservation and restoration in the new City Master Plan. In accordance with the recently formulated National Biodiversity Plan, local objectives for open space and biodiversity management are based on principles of sustainable urban development including preservation of the natural and built heritage, provision of ample open space, and maximum protection of landscape and environmental values, including ecosystems. These important objectives, detailed and codified in the Jerusalem City Master Plan, are monitored by the Municipal Urban Planning and Environmental Protection Committees which review planning goals and determine policy on a regular basis. In addition, the Sustainable Planning Department, established in 2009, follows up on the decision-making process to assure policy implementation. In conjunction with its LAB (Local Action for Biodiversity) program, Jerusalem has recently launched the establishment of an LBSAP - a Long Term Biodiversity Strategy and Action Plan for the efficient management of the city's urban nature infrastructure.



Photos 1+3: Yossi Zamir; Photo 2: Courtesy of SPNI



# The Wildflower Sanctuary

Once used as an illegal dumping ground, residents of this 5-acre nature reserve have transformed the area into a first of its kind local wildflower sanctuary with over 55 native trees and plants rescued from different construction sites around the city. Bursting with beautiful indigenous flowering plants (such as wild orchids, protected by law), this site at the edge of a low-income immigrant neighborhood is quickly being transformed into a popular recreational and educational attraction. Scientific research is being conducted jointly by the Jerusalem Botanic Gardens and the Hebrew University on urban greenery and wild flora salvation. A unique seedling nursery has been created with samples

of indigenous wildflowers and plants mentioned in the Bible, representing a sustainable approach to landscaping in our region. The sanctuary has become a destination for school outings dealing with biblical plants and agricultural methods, as well as environmental and wildlife conservation. Residents together with the city have developed a rainwater harvesting facility for irrigating the site. The City is currently completing plans for an ecological center for youth adjoining the sanctuary. Educational and recreational activities for young people will be planned using the sanctuary both as a resource and as a site to be nurtured and preserved.



Photos: Victoria Kovalev; Courtesy of SPNI



# The Gazelle Valley

Jerusalem residents enjoy the presence of a unique natural phenomenon right in the midst of the urban heartland. Trapped between busy roads, housing developments and a modern super-highway, a rich wildlife habitat flourishes with orchards planted on ancient terraces that still bear fruit. This 50 acre tract of undeveloped land in Southern Jerusalem is home to a small population of gazelles that sustain on the local natural resources. Threatened in the past by massive housing development plans, grassroots opposition initiated by residents of adjoining neighborhoods defeated these plans. In cooperation with SPNI (the Society for the Protection of Nature in Israel), the Jerusalem Foundation and the Soreq Valley Drainage Authority, the City of Jerusalem is planning the establishment of the *Gazelle Valley Urban Nature Park*, which will insure the protection and restoration of the site's unique biodiversity and ecosystems. Recently, final approval was given for the statutory plan to preserve the valley as a natural heritage site, protecting it from any future construction. At this time detailed plans for the

development of the valley as a nature park are being advanced. The *Gazelle Valley Urban Nature Park* will be the first urban nature wildlife park in Israel, and as such its success is critical to pave the way for numerous initiatives throughout the country, promoting urban nature as a resource for leisure, education, tourism, research and culture.



Photo: Uzi Shamir; Diagram: Courtesy of SPNI



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# The Bird Observatory

Israel serves as a habitat for millions of migratory birds. The Jerusalem Bird Observatory (JBO), founded in 1994 as the first community-based urban wildlife site in Jerusalem, studies this unique natural phenomenon. The site, currently operated and maintained by a staff of Society for the Protection of Nature (SPNI) researchers, educators and volunteers, was established by community activists. Activities focus on bird monitoring research, education and recreation, with the goal of involving as many residents as possible in a variety of urban nature topics. The JBO site is rich in natural resources typical to the Jerusalem Hills area. Its location adjacent to the Knesset (Israel's Parliament) and

Supreme Court, within walking distance from the center of town, enables thousands of school children and visitors from all across the city to visit the center and experience a unique encounter with wildlife activities. The Observatory staff has developed an exceptional educational program that combines observing bird tracking and meeting with researchers and experienced guides. The bird hide built at the JBO allows visitors to watch the birds and wildlife freely throughout the day and all through the year, at no cost. With the help of many volunteers, this invaluable urban nature site serves thousands of visitors each year, and has ringed more than 2000 birds.



Photos: Amir Balaban



# Metropolitan Parks

The Municipality of Jerusalem, together with the Jerusalem Development Authority, the National Parks Administration, and the JNF (Jewish National Fund), is developing a ring of parks around the city which will incorporate 1,500 hectares of existing parkland, nature reserves, forests and open spaces. Included in the restoration area are the rolling hills that surround Jerusalem, encompassing the Arazim, Motza, Refaim and Tzofim valleys. Committed to promoting the values of conservation and sustainable development, Jerusalem is working to formulate a plan in cooperation with public and other government institutions to determine the right vision and strategy for implementing this invaluable project. Existing natural and historical sites will be upgraded making them useable, accessible and welcome to the general public. Dry streambeds will be rehabilitated so that they can once again support flora and fauna. The numerous springs in the area will be

cleaned and restored. Existing forests will be tended and orchards consisting of native Israeli fruit trees will be planted, developed and expanded. The plan includes 42 km of bike routes encompassing Jerusalem, hiking trails, recreational and sports facilities, picnic areas, and coffee shops, designed to provide much needed relief for residents of the city's densely populated neighborhoods. The current road that winds through the parklands will become a promenade closed to traffic and the entire area will be made accessible to the disabled. Water for irrigation will be provided by sewage purification plants currently under construction. The goal of the Metropolitan Parks project is to conserve and capture the breathtaking natural landscape that surrounds the city while offering quality recreational opportunities to residents and visitors alike, promoting urban eco-tourism.



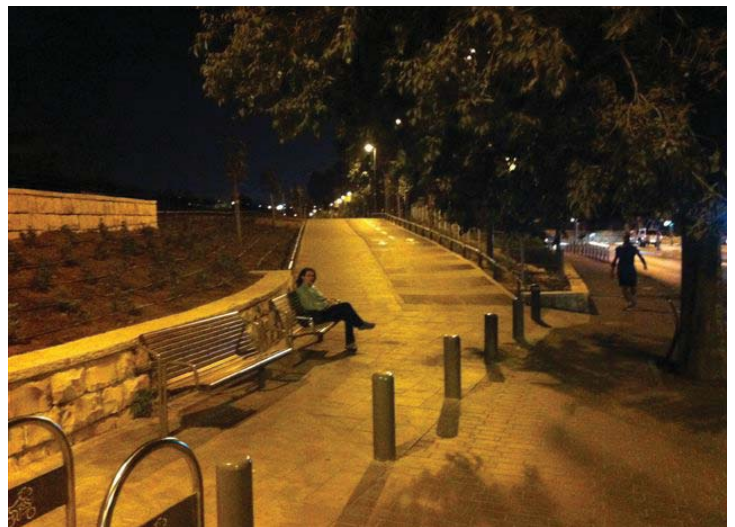
Photo: Yossi Zamir





# The Railway Park

A grass roots movement working together with SPNI has won the battle to restore the abandoned railway line and develop a corridor park serving neighborhoods in the southern part of the city. The Jerusalem Development Authority and the Jerusalem Municipality, with the support of the Gottesman Family, have been actively involved in the conservation, planning and development of this neglected open space. Together, they have turned the area into a charming cultural and recreational nature spot for residents and visitors to enjoy in the midst of the hustle and bustle of the urban landscape. The Railway Park runs upstream through the Refaim Valley along the abandoned Turkish railroad track, from the new train station in the Malcha business district to Bible Hill, near the City Center. An integral part of the city's urban nature and open spaces infrastructure, the park offers pedestrians easy access to a walking path and provides cyclists with a convenient transportation route, connecting between different neighborhoods and attractions in the city. It also provides recreational spaces to local residents and acts as a meeting place for sports and leisure activity, creating community pride, unity and identification through connectivity with nature and the environment. Once completed, the park will include eight kilometers of landscaped walking and cycling paths within the city as well as sports and fitness facilities, and it will connect with the ring of Metropolitan Parks now being developed around Jerusalem. The Railway Park exemplifies the city's sustainable planning philosophy which aims to promote healthy living, historic preservation and nature conservation, while leveraging the urban infrastructure for social and economic development to benefit all of the city's populations.



Photos: Courtesy of the Jerusalem Development Authority





# Active Transport - Cycling and Walking Routes

Transportation is the major cause of air pollution in cities. Recognizing the need for more efficient and alternative modes of transport, Jerusalem is establishing bicycle-friendly infrastructure, including a network of upgraded pedestrian trails. There are 21 km of existing urban bike paths in Jerusalem and plans are moving ahead to add new possibilities for residents who choose to use their bikes as a means of active transport and not just for leisure. Bicycle-friendly cities create healthy lifestyle options for residents while projecting an attractive image to visitors and prospective newcomers. Safe cycling paths with secure bike park facilities encourage less use of private cars, and reduce the level of harmful carbon emissions and air-pollution. The new City Master Plan supports preserving, improving, creating and institutionalizing bicycle-friendly routes and pedestrian pathways throughout the city. These will eventually link up with the green belt of Metropolitan Parks, which will surround the city and add 42 km of bike routes for leisure and sport. Downtown Jerusalem has been closed to private vehicles since the Light Rail began operating in 2011. The Jerusalem Transportation Masterplan Team is currently planning bike access from all neighbourhoods that adjoin the Light Rail line. With bike paths feeding into the route, separated from cars (where possible), and linking all major destinations, residents will be able to cycle to the Light Rail stations, leave their bikes there, and continue on by train. Improved cycling and walking options will also promote tourism, allowing visitors to enjoy the sites of Jerusalem while "leaving a positive footprint" in the city.



Photos: Courtesy of SPNI



# The Consumer Guide to Healthy Housing

As urban populations grow, the quality of the urban environment plays an increasingly important role in public health. Solid waste disposal, water quality, transportation problems, lack of open green space, and electromagnetic radiation are only a few of the issues on the agenda. The Consumer Guide to Healthy Housing, the first of its kind in Israel, turns environmental health into a consumer issue. An SPNI (Society for the Protection of Nature in Jerusalem) initiative in partnership with the Ministry of Health and the Ministry of Environment, the guide is an innovative tool offering practical advice and assistance to the public in identifying, assessing, and mitigating harmful environmental factors around the home and in the neighborhood that affect public health. Once published, in 2012, the Guide to Healthy Housing is expected to respond to the challenge of raising awareness among all sectors of the population. It will not only provide information to residents throughout Israel about neighborhood environmental hazards and benefits, but will enable them to interpret that information in terms of health impacts. Through knowledge and awareness, residents will have greater control over decisions and actions relating to their environment that can have a life-long impact on their health and well being.



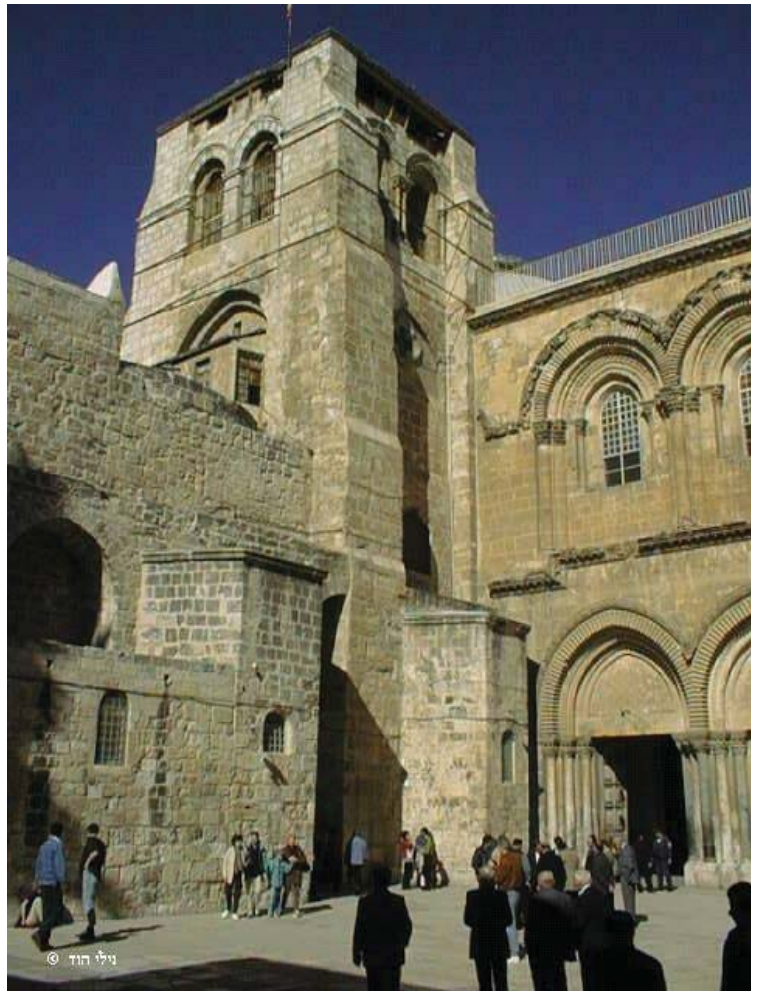
Photos: Courtesy of Helene Roumani & SPNI



# Green Pilgrimage City

The Green Pilgrimage Network (GPN) is one of Jerusalem's most recent green initiatives. Based on the idea of bringing environmental awareness into the religious pilgrimage experience, the Green Pilgrimage Network links Jerusalem's ancient identity as a holy city for Christians, Jews and Muslims with its most recent aspiration - to become identified as a green metropolis. Coordinated by ARC (Alliance of Religions and Conservation), the GPN was officially launched in Assisi, Italy at a November 2011 meeting of representatives from pilgrimage cities in Europe, Asia, Africa and the Middle East. This event was a follow-up to an interfaith commitment for environmental action made by representatives of nine major world religions at Windsor

Castle in 2009. Greening pilgrimage routes entails promoting more sustainable tourism practices, identifying and developing eco-tourism attractions and providing an opportunity for pilgrims to "leave a more positive footprint" at the places they visit. This initiative aims to redirect existing tourism to include a focus on environmental awareness and protection, and to generate investment in sustainable urban infrastructure. Even more importantly, Jerusalem as a Green Pilgrimage City hopes to create a platform for those of different faiths to draw from experience within both their religious traditions and their local communities to work towards shared environmental goals.





# Kidron/Wadi El Nar Basin Restoration Plan

The City of Jerusalem is divided between two distinct water sheds. Two thirds of the sewage from Jerusalem and surrounding areas falls within the Western Watershed and is directed to a purification plant in the Soreq Valley. The remaining third (15 million cubic meters per year) runs down through the Kidron/Wadi El Nar Basin and out to the Dead Sea, constituting a major environmental and public health problem. Once an important pilgrimage route, the Kidron/Wadi El Nar Basin is dotted with religious sites, tombs and monasteries. Today, raw sewage makes the area unattractive for pilgrims and hazardous to the health of the area's 200,000 residents. Because the basin spans an area that traverses several geopolitical boundaries and

falls under different jurisdictions, any solution to the problem must be undertaken jointly by the affected parties. Currently, the City of Jerusalem is working with Palestinian partners in the Kidron/Wadi El Nar Basin, and the Dead Sea Drainage Authority, collaborating on a project to treat the sewage and provide a reliable source of water and energy for those living in the valley. Together, they hope to revitalize the ancient area, turning it from the region's backyard into an economically and ecologically vibrant example of cross-boundary cooperation. The aim is to promote eco-system conservation and management, along with local community development through improved employment opportunities and tourism.



Courtesy of the Kidron/Wadi El Nar Basin Restoration Master Plan



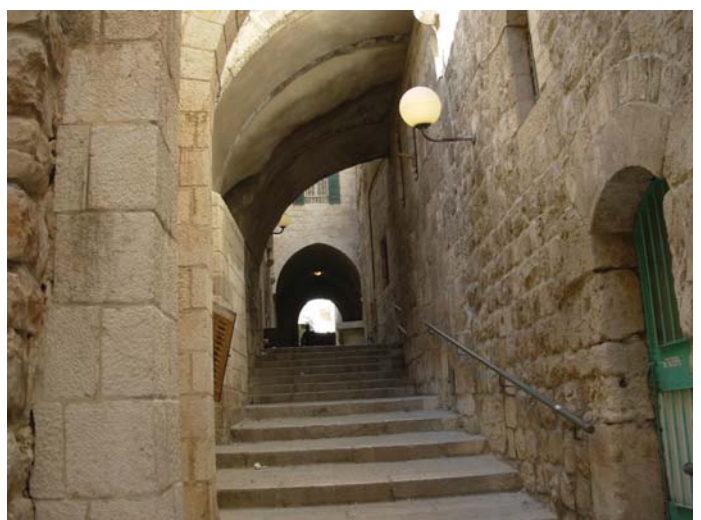
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# Old City Conservation and Management Plan

The Old City of Jerusalem, recognized by UNESCO as a World Heritage Site, comprises more than 600 ancient archaeological sites such as the Western Wall, the Temple Mount, the City of David, remnants of Herodian palaces and authentic Roman streets. In addition it contains a thriving market place, colourful shops and art galleries, attracting 2 million tourists a year including massive religious pilgrimages. Encompassing some 420 acres, the Old City is also home to over 35,000 residents including Moslems, Christian Arabs, Jews and Armenians, in neighbourhoods that wind through a complex infrastructure of quaint cobblestone streets and narrow alleyways. The City of Jerusalem, together with the Israel Antiquities Authorities, has commissioned a plan that would act as a guide for the conservation of many of the holy sites, culturally significant buildings and monuments in the Old City, while enabling sustainable continuation of the existing civil, religious, cultural, and institutional patterns. In addition to conservation, goals of the project include socio-economic development, improving the quality of life in view of population density, and upgrading infrastructure while investing in maintenance and comprehensive management. The plan undertakes rehabilitation of housing and public open spaces, improving accessibility and making appropriate parking facilities available, as well as instituting traffic control with the aim of eventually excluding all but essential traffic from the Old City. Ongoing conservation works will be minimal in keeping with guidelines adopted by relevant international bodies. The plan aims to both improve economic conditions for residents and also provide additional opportunities for sustainable cultural tourism.



Photos: Yitzhak Shweiki





# Street of the Prophets Restoration

Extending from the medieval walls of the Old City's Damascus Gate and Arab marketplace through the city's modern thoroughfares, the Street of the Prophets connects diverse populations and joins the old and the new like a journey in time. Covering historic periods that range from the ancient to the present, this distinctive heritage route houses important institutions built in Jerusalem during the 19th century such as the Anglican School, the Swedish Theological Institute, the Lycee Francais, Bikur Holim Hospital, the International Evangelical Church and the Israel Ministry of Education. It was the street of foreign consulates and the residence of famous doctors, clergymen, artists and poets, whose stately homes still grace its courtyards and alleyways. This eclectic mix of locals and foreigners, old and new, religious and secular, continues to reflect the character

of the street today making it a popular choice of guided tours for residents and visitors alike. In recognition of its unique character and historic significance, and after much public participation and debate, the City of Jerusalem has declared its intention to preserve and develop the Street of the Prophets as an urban heritage reserve where none of its architectural features will be destroyed. Instead, the street will be refurbished, and with time, plans for alternate transportation routes developed such that ideally it could be closed to all but residential and public transport. Transforming the street into a cultural promenade while preserving its landmark buildings and heritage will create a potential social and commercial meeting place for residents of different ethnic groups, and in parallel, also provide an important source of sustainable tourism.



Photos: Yitzhak Shweiki; Courtesy of SPNI



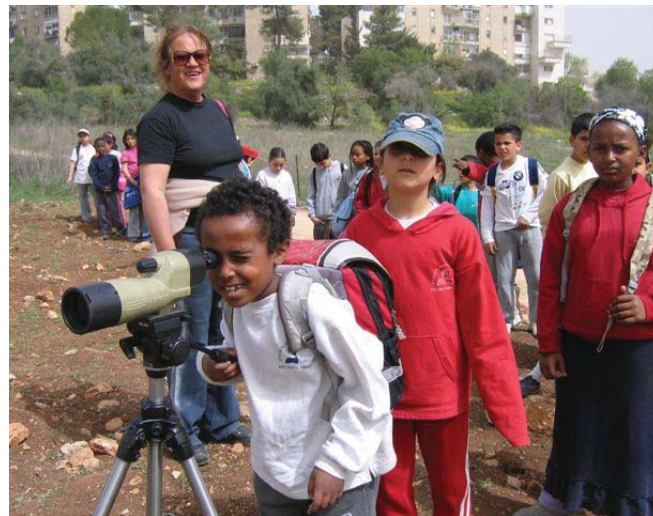


# CEPA - Communication, Education and Public Awareness

Urban nature sites, community gardens, parks and forests all invite residents to engage actively as stewards of nature. The Municipality fosters this engagement through mechanisms of public participation and through support of community initiatives. In these projects the community based organizations are the city's natural partners. Environmental education in schools plays an important role in preparing the citizens to be responsible guardians of the environment.

Children Make a Difference is a comprehensive educational curriculum, introduced by the Society for the Protection of Nature in Jerusalem (SPNI), which teaches environmental awareness and principles of community participation to children on the elementary school level. In the framework of this innovative program, precepts of environmental protection such as waste reduction, resource conservation, and sustainable agriculture are taught in conjunction with festivals and seasonal observances. The curricula are tailored to the needs of each school and surrounding area. With hands-on ecological activities, the program incorporates traditional and ethical sources, teaching children the intrinsic value of nature, while promoting a sense of respect and civic responsibility. Already operating in more than a dozen elementary schools in Jerusalem, Children Make a Difference offers a six year program that empowers the child with practical knowledge and creative tools aimed at developing a healthy, positive attitude towards the natural environment, and a proactive sense of commitment to community involvement from early on in life.

Another unique environmental education program is In the Path of Light. Sponsored by the city in cooperation with the Israel Electric Company, it teaches young children and their parents how to use electricity safely, how to identify potential hazards, and the significance of saving energy. The success of these programs lies in their ability to convey to students the values that support a personal and ideological link with the underlying principals of ecological sustainability.



Photos: Amir Balaban; Courtesy of SPNI





# School for the Hearing Impaired

Founded in 1930, this special education center for the deaf and hearing impaired serves both Jewish and Arab students from age 6 to 21. During the past three years the Society for the Protection of Nature in Israel (SPNI) has helped green the campus by establishing the school's ecological garden in an effort to teach conservation and promote lifestyle changes while reducing waste and recycling materials. The entire school is trained in the principles of composting. Students and staff alike carry their lunch leftovers to the compost piles daily, which are later tended by the students and used to fertilize the school's garden. The uniqueness of the program lies in its ability to integrate classroom learning with hands-on, out-door experiential education. Known to have a significant and positive impact on a child's personal and social development, this method is especially relevant in the case of children who have a hearing impediment. The program has become a model for special education schools in Jerusalem and around the country.



Photos: Courtesy of SPNI



Jerusalem is taking bold steps to improve its footprint through the new City Master Plan, through assessment and implementation of new measures and legislation to reduce carbon emissions, and through partnerships working together with government, business and NGO initiatives in all sectors of the city.

