



## INFRASTRUCTURE PROJECT OPPORTUNITIES for Chinese Construction and Energy Companies In Israel

## 中国建筑公司在以色列 的基础建设项目机会

Israel's Infrastructure and Energy Sectors provide many opportunities to Chinese construction & energy companies, as evident in several leading Chinese construction companies' successful performance of major Israeli infrastructure projects.

Below we provide you with a brief snapshot of past projects performed by Chinese companies in Israel and future opportunities for Chinese construction companies and financiers in Israel.

### Infrastructure in Israel

Israel is set for a \$32 billion infrastructure spending boost, offering attractive opportunities with plentiful deal flow.

Israeli infrastructure key growth segments include local government authorities, defense industries, and private companies.

Most infrastructure assets are owned by the Israeli government which understands that attention to infrastructure is of fundamental importance to the successful economic growth of Israel. This is demonstrated in efficient government tenders for public-private partnerships as well as for strait government contracting. Additionally, the Israeli government takes a noteworthy involvement in project risk allocation – providing safety nets to concessionaires, such as the

以色列的基础设施和能源部门为中国建筑和能源公司提供了许多机会。中国已经有几家顶级建筑企业在以色列成功开展了一些大型基础设施项目，充分证明了在这个领域的发展潜力。接下来，将为您简要介绍一下中国企业过去在以色列所开展的项目，以及中国建筑企业和金融企业未来在以色列的发展机会。

### 以色列的基础设施

以色列制定了320亿美元的基础设施支出增长计划，其目的是创造良好的机会，促进相关领域的大量交易。

以色列与基础设施相关的主要行业客户包括：本地政府机构、国防行业、以及私人企业。

大部分基础设施资产都归以色列政府所有。以色列政府非常清楚：重视基础设施，是推动以色列经济成功发展的重要因素。因此，政府积极推动公私合作形式的高效招标机制，并推动海峡政府承包机制。另外，以色列政府还积极开展项目风险分配计划，以期为经营者提供安全的保护网，

assumption of demand risk and other guarantees. Additionally, the government of Israel realizes that foreign companies may be deterred by Israel's geopolitical situation, and therefore the Israeli government provides forms of safety nets in the event of war, terror, and other hostile activity. Such safety nets include the government's assumption of the senior debt upon the occurrence of such events.

The level of infrastructure in Israel is insufficient and Israel is still in the process of building and improving its infrastructure, particularly in the area of public transportation, and mainly in the major cities, though also in the electricity delivery system. For many projects, Israel looks for outside help, soliciting international tenders and partnerships, and the coming years will see many opportunities, specifically relating to, highways, railways, energy, off shore gas, and water.

The attached Infrastructure for Growth plan 2017 released by the Israeli Government, shows its multi-year program for infrastructure development which includes a list of 147 infrastructure and energy projects valued at ~\$30 million and above totaling approx. ILS 116 billion, whose construction shall begin in the years 2017-2021. The projects presented in the list are projects which are already in progress as well as projects which are budgeted or approved by the government. There are also several projects that have not yet been approved, but have been examined financially, and there is high probability that they will be implemented in the next 5 years. The majority of these projects are transport projects which include several PPP's such as: the Tel Aviv Light Rail Green Line (ILS 20 billion), and the Tel Aviv Light Rail Purple Line (ILS 8.6 billion), and the fast lanes for Road 2 and for Road 20.

The list of projects will provide your clients and affiliates an opportunity to consider the business opportunities Israel's infrastructure and energy sectors afford.

### **Energy projects in Israel**

Since Israel's establishment, and until the late 90's, Israel's energy market was characterized by undersupply and imbalance between the different regions of Israel, increasing consumption and virtually no competition. There were no marketable energy sources at hand and Israeli's principal energy sources were imported fossil fuels. Furthermore, electricity generation, transmission and distribution were undertaken by Israel Electricity Company Ltd. ("IEC"), a government-owned monopoly.

Be that as it may, in the last 10 years, the energy market in Israel has changed significantly. Passing the Electricity Sector Law, 5756-1996, introduced structural changes, and transformed the Israeli electricity sector

比如政府承担需求风险并提供其它担保措施。除此以外，以色列政府还很清楚：以色列的地缘政治因素可能会妨碍外国企业进入以色列。为此，政府提供了针对战争、恐怖袭击、以及其它敌对活动的各种安全防护网机制，其中包括规定：在出现上述事件后，由政府承担优先债务。

以色列的基础设施还不够完善，以色列仍然在不断建造和改进基础设施，尤其是在公共交通运输领域，并将重心放在大城市，同时也关注供电系统。在很多项目中，以色列都希望能够得到外来帮助，寻求国际招标和合作，在未来几年中，会有更多的机会出现，尤其是在高速公路、铁路、能源、海上天然气和水资源等领域。

在本文所附的以色列政府2017年基础设施发展规划中，介绍了以色列的多年基础设施开发计划，其中包括一份147个基础设施和能源项目的清单，这些项目的价值都不低于3000万美元，总价值约为1160亿新锡克尔，相关建设工作计划在2017-2021年开始。在清单所列的项目中，包括已经启动以及已经拟定预算或被政府批准的项目。另外还有若干项目尚未被批准，不过已经完成了财务审查，在未来5年内启动的可能性很高。在这些项目中，大部分都是交通运输项目，其中包括一些公私合作项目，比如特拉维夫轻轨绿线（200亿新锡克尔）、特拉维夫轻轨棕线（86亿新锡克尔）以及2号和20号公路的快速车道。

您的客户和相关企业可以通过该项目清单，了解以色列的基础设施和能源行业所提供的商业机会。

### **以色列的能源项目**

自从以色列建国以来，一直到九十年代末期，以色列的能源市场都存在供应不足的情况，并且各个地区之间不平衡，导致能源消耗增加，并且几乎没有竞争机制。当时以色列没有可以销售的能源，其主要能源都依赖进口的化石燃料。此外，发电、输电和配电都被国有企业以色列电力有限公司（“IEC”）所垄断。

不过，在过去的10年中，以色列的能源市场发生了显著的变化。在通过《电力行业法》5756-1996之后，市场结构出现了变化，以色列的电力



from a concession-based sector to a license-based sector. This framework has allowed for Independent Power Producers (“IPPs”), to own and operate large-scale conventional, solar, wind and pump storage hydroelectricity facilities.

**The energy sector in Israel is under developments and provides private companies great opportunities.**

For an example of such opportunities for IPP’s, please see the Energy chapter in the Israeli Governments Infrastructure for Growth Plan.

**Click Below to Expand :**

行业从特许权经营模式转变为许可经营模式。在这个法律框架下，独立发电商（“IPP”）可以拥有和经营大规模的传统能源、太阳能、风能、以及抽水蓄能水力发电厂。

以色列的能源行业正在发展，为私人企业提供了很多机会。

您可以参见以色列政府基础设施发展规划中的“能源”一章，以便通过实例了解公私合作机会。

**点击下方可以展开：**



Additionally, in December 2017 the Israeli government and the IEC agreed on a major reform which will lead to the sale of six (6) power plants with a total capacity of approx. 2000 MW to IPP’s.

**Infrastructure Projects to look out for**

**NTA Green Line.** The line will connect the southern parts of the metropolis (Holon and the outskirts of the city of Rishon LeZion) and the northern ones (Herzliya) with the city of Tel Aviv, providing a solution for future

另外，在 2017 年12月，以色列政府和以色列电力有限公司商定：进行一项大规模改革，向公私合作企业销售六（6）个发电厂，其总发电量约为2000兆瓦。

**基础设施和能源项目展望**

**脱盐项目：**对索瑞克（Soreq）的一个脱盐厂的规划、融资、建设和运营进行资格



developments through the main business center in Northwest Tel Aviv and Western Herzliya, and enables access to the employment centers in Ramat HaChayal, Tel Aviv University, Holon, Rishon LeZion and Herzliya Pituach. The length of the line is about 39 km, of them approx. 4.5 km underground with around 61 stations.

**NTA Purple Line** is planned to link the areas of Eastern Tel Aviv to the center of Tel Aviv and will run at ground level. Its total length is expected to be approximately 28 km. At the initial stages, it will pass through Ramat Gan and Tel Aviv.

### Example of Chinese companies performing infrastructure projects in Israel:

#### 1. Motorways

##### • Carmel Tunnel Toll Road:

Chinese infrastructure firm CCECC performed the tunneling works as principal contractor for the concessionaire owned by Ashtrom and Shari Arison's Housing and Construction. The tunnels' purpose is to reduce road congestion in the Haifa area and to provide an alternate route of reaching the eastern and central parts of the city of Haifa. The toll tunnels were built and are operated as a BOT project. They were opened to traffic on 1 December 2010 and represent the 1st major Chinese involvement in Israeli infrastructure projects.

##### • Gilon Tunnel

Danya Cebus and China Civil Engineering Construction Corp ("CCECC") performed the work on a 4-6 km twin-bore tunnel that will carry the new 'Akko - Karmi'el rail line under the Gilon Mountain. Work was performed under a US\$276m contract awarded to Danya Cebus and CCECC in 2011 by Israel National Roads Company Ltd, which is also responsible for rail projects.

##### • Highway 16

China Civil Engineering Construction Corporation Ltd. (CCECC) and Pan Mediterranean Engineering Company (PMEC) a unit of China Harbor Engineering Company recently submitted bids on the highway 16 project that will be built on a public-private partnership (PPP) basis with the winning bid planning, financing, designing, building, operating and maintaining the highway on a 25 year concession. The new highway will enter Jerusalem through its southwestern

预审和招标，该脱盐厂将至少每年提供1.5亿立方米的淡水。施工地点在索瑞克地区。新建成的工厂将是全球最大的脱盐厂之一，将使以色列目前的脱盐水产量增加25%。在以色列缓解全国农场主和环境压力计划中，有两个与本领域相关的招标项目，本项目是第一个。

**以色列特拉维夫都会区公共运输有限公司 (NTA) 绿线项目:** 本项目将把南部城区 (霍隆以及里松·莱锡安市郊) 以及北部地区 (荷兹利亚) 与特拉维夫市连接起来，为未来贯穿特拉维夫西北部以及荷兹利亚西部主商业中心的开发计划奠定基础，并连通位于拉马特哈哈亚尔、特拉维夫大学、霍隆、里松·莱锡安和赫兹利娅·皮杜赫的各个就业中心。该线路的长度约为39公里，其中地下部分约为4.5公里，共有约61站。

**NTA紫线项目:** 该项目计划将特拉维夫东部地区与特拉维夫中心连接起来，并全程地面运行。其总长度预计约为28公里。在项目前期阶段，会穿过拉马特甘和特拉维夫。

### 中国公司在以色列开展基础设施项目的实例:

#### 1. 公路

##### • 卡梅尔隧道收费公路

中国基础设施企业中国土木工程集团有限公司作为主承包商，在Ashtrom和Shari Arison房屋和建筑公司的特许经营项目中完成了隧道工程。本项目隧道的作用是减少海法地区的公路交通拥堵，并为前往海法市东部和中心地区的人们提供一条备选路径。收费隧道作为一个“建设-经营-转让”型项目来建设和运营，在2010年12月1日通车，这也是中国参与建设的首个大型以色列基础设施项目。

##### • 吉隆隧道

以色列 Danya Cebus 公司和中国土木工程集团有限公司 ("CCECC") 完成了4-6公里的双孔隧道工程，该隧道用于位于吉隆山区的新“阿克科-卡米尔”轨道线路。该工程合约价值2.76亿美元，在2011



neighborhoods, and will ease congestion on the existing Western entrance to Jerusalem

## 2. Railways:

### • NTA TBM Eastern Segment

China Civil Engineering together with Israeli company Denya Cibus are performing the construction of underground stations and digging tunnels in the eastern segment of the Tel Aviv Light Rail project after winning the TBM Eastern Segment tender issued by NTA Metropolitan Mass Transit System Ltd. (“NTA”). The Eastern segment includes the construction of three underground stations comprising two 3.5-kilometer parallel tunnels.

### • NTA TBM Western Segment

China Railway Tunnel Group (CRTG) together with Shikun Binuy unit Solel Boneh controlled by Shari Arison are performing the tunnels and underground stations in the Western section of the Tel Aviv light rail’s red line after winning the TBM Western Segment tender issued by NTA. The Western section includes two parallel 5 kilometer tunnels and six underground stations. The works are valued at approx. 2.9 Billion.

### • NTA Rolling Stock

Chines Company Changchun Railway Vehicles Co., Ltd. (“CNR”) won the tender and is currently performing the project for the provision of the Rolling Stock Vehicles for the Tel Aviv Red Line, the 1<sup>st</sup> line of the Tel Aviv Light Rail Project.

The Chinese partnership of CRTG and EEB as the winner of the Red Line Systems tender. The CRTG-EEB group will be responsible for the construction of the electrical and communications systems and for the installation of the light rail tracks; the German company Deutsche Bahn will manage the integration of all the systems in the project. The Systems contract is considered one of the most prestigious projects on the Red Line and the works are valued at approx. 2.5 billion NIS.

### • Jerusalem Green Line Light Rail Transit

The two Chinese companies CREGC and CRRC recently submitted responses to the PQ for the Jerusalem Green line light rail transit project

年由以色列国家公路有限公司（同时负责轨道项目）与 Danya Cibus 和中国土木工程集团有限公司共同签署。

### • 16号高速公路

中国土木工程集团有限公司（CCECC）与中国港湾工程有限责任公司下属的泛地中海工程有限公司（PMEC）最近对16号高速公路项目进行投标，该项目将采用公私合作（PPP）的方式，中标方将基于25年的特许权，负责该高速公路的规划、融资、设计、建造、运营和维护。新建的高速公路将通过西南部地区进入耶路撒冷，并将缓解耶路撒冷西部入口地区目前的交通压力。

## 2. 铁路:

### • NTA TBM东段项目

在以色列特拉维夫都会区公共运输有限公司（“NTA”）的TBM特拉维夫轻轨东段项目中标之后，中国土木工程集团有限公司与以色列Denya Cibus公司正在为该项目建设地下车站并挖掘隧道。在东段工程中，包括建设三个地下车站，项目共有两个3.5公里的平行隧道。

### • NTA TBM 西段项目

在以色列特拉维夫都会区公共运输有限公司的TBM特拉维夫轻轨红线西段项目中标之后，中铁隧道集团有限公司（CRTG）与 Shari Arison 控股的 Shikun Binuy 和 Solel Boneh 公司正在西段进行隧道和地下车站建设工作。西段包括两个5公里的并行隧道和六个地下车站。相关工程造价约29亿新锡克尔。

### • NTA铁道车辆

中国企业长春轨道客车股份有限公司（“CNR”）在此项目中标，目前正为特拉维夫红线提供轨道车辆，该项目是特拉维夫的第一个轻轨线项目。

中铁隧道局集团有限公司和中铁电气化局集团公私合作，在红线系统项目中标。双方将负责建设电气和通信系统，并安装轻轨轨道；德国企业 Deutsche Bahn 将负



progressed on a public-private partnership basis with the winning bid planning, designing, financing, building, operating and maintaining the light rail transit on a 25 year concession. The Green Line will serve around 160,000 of the city's daily passengers, and will connect some of its most important hubs, and together with the red line, will serve about 250K people per day. The Green line is estimates to be one of the largest projects across Europe and the Middle East.

- **Tel Aviv to Eilat Rail Project**

In 2012 the governments of Israel and China signed cooperation agreements to build the Eilat railway and other future projects, including the inland canal port north of Eilat. The main project on the agenda is the construction of a cargo rail line that will link Israel's Mediterranean ports in Ashdod and Haifa with the Eilat Port. There are also plans to extend the line to Jordan's Aqaba Port. Israel has declared the Eilat railway a national priority project, because of its strategic and policy importance, and the Chinese Government also consider the project to be important, as it fits in with China's global strategy to strengthen critical trade routes. The 180-kilometer line will run through the Arava Valley and Nahal Zinn and the estimated cost of the line is at least NIS 25 billion. The Israeli government is still considering the method to administer and finance this project, and is weighing up between traditional BOT Tender or awarding construction of the project to Chinese companies, because of their rapid work, and is therefore considering a government-to-government agreement to bypass the Tenders Law in awarding the franchise, however the former option appears to be the more likely form of tender that will be implemented.

### 3. Marine:

- **Ashdod Port**

China Harbor Engineering Company unit PMEC is building the Ashdod Port for approx. NIS 3.35 billion after winning a tender issued by Israel Ports Company. The works include construction of a working quay, extension of the existing main breakwater by 600 meters, constructing 1,500 meters of secondary breakwaters, constructing quays, with a main quay of 800 meters in length and a 17.3 meter depth of water, constructing

责管理项目所有系统的集成。该系统合约是红线轻轨最大的项目之一，工程造价约25亿新锡克尔。

- **耶路撒冷绿线轻轨运输**

中国的两个企业中铁二局集团有限公司和中国中车股份有限公司最近为耶路撒冷绿线轻轨运输招标项目提交了资格预审文件。该项目采用公私合作模式，中标方将基于25年的特许权，负责该轻轨运输系统的规划、设计、融资、建造、运营和维护。该绿线将在城区每天运送16万人次的乘客，并将一些最重要的交通枢纽连接起来。与红线一起，每天的总客流量将达到约25万人。预计绿线将是欧洲和中东最大的项目之一。

- **特拉维夫-埃拉特轨道项目**

在 2012 年，以色列政府和中国签署了合作协议，建造埃拉特铁路和其它未来项目，其中包括位于埃拉特以北的内陆运河港。在施工计划中，主要项目包括建设一条货运铁路线，将以色列位于阿什杜德和海法的地中海港口与埃拉特港连接起来。另外还计划扩建通往约旦亚喀巴港的线路。以色列已经宣布：埃拉特国家属于国家重点项目，因为它具有重要的战略和政治意义。同时，中国政府也非常重视该项目，因为它符合中国强化关键贸易路线的全球发展战略。这条铁路线长180公里，将穿过阿拉瓦谷和纳哈尔·津恩，预计造价至少为250亿新锡克尔。以色列政府目前仍然在考虑这个项目的管理和融资方案，并且权衡相关因素，以决定是采用传统的建设-经营-移交招标式，还是将项目建设承包给中国企业，因为中国企业的项目速度很快，所以以色列政府也考虑签署政府间协议以便绕过《招标法》授予特许权。不过，采用第一种招标模式的可能性应该更大。

### 3. 海洋:

- **阿什杜德港口**

中国港湾工程有限责任公司下属的泛地中海工程有限公司在以色列港口公司的一个



storage and operating areas, and dredging.

#### • Haifa Port O&M

Shanghai International Port Group has been awarded the government tender to operate and maintain the new port in Haifa for 25 years. The new Haifa Port is expected to commence operations in 2021. The two new ports are key projects in Israel that are expected to address the needs of the economy and promote vital competition in the ports sector for the benefit of the public, in keeping with the model in place at most ports around the world. Israel Port Authorities award of these projects to two Chinese companies is a vote of confidence in Chinese construction companies in Israel.

#### 4. Real Estate:

1. Beijing Construction Engineering Group signed an agreement with Karaso Real Estate for the construction of 742 residential apartments spread over 6 sky scrapers of 30 floors. Beijing Construction Engineering Group has been engaged to construct 129 apartments and an underground carpark of 20,000 SQM. Beijing Construction Engineering Group, is one of 6 Chinese construction companies approved by Israel's Ministry of Construction

2. Israel's Construction Company, Tedhar Group signed a strategic cooperation agreement with China State Construction Engineering Corp. (CSCEC). Tidhar is Israel's largest private real estate group and contracting firm. Cooperation will be through CSCEC's China Construction Second Engineering Bureau (CCSEB) subsidiary. Under the agreement, the parties will cooperate in the construction of thousands of housing units in Israel on which construction has already begun, and in other projects with a total value of NIS 1.5 billion.

3. The Construction and Housing Ministry has approved the following 5 Chinese construction companies **Beijing Construction Engineering Group, Jiangsu First Construction, Everbright International Construction Engineering, JiangSu Nantong No. 2 Construction Engineering (Group), China Haushi Enterprise**, to perform construction work in Israel. These companies will be entitled to build residences in Israel, and to manage residential construction projects as the party responsible for all the engineering and performance aspects of the project. This measure will bring 6,000 more

项目中标，目前正在建设阿什杜德港口，造价约为33.5亿新锡克尔。该工程包括建造一个作业码头，将现有的主防波堤扩建600米，建设1,500米的辅助防波堤，建设码头（主码头长800米，水深17.3米），建设仓库和作业区，以及疏浚工程。

#### • 海法港的运营和管理

在一项政府招标中，上海国际港务集团中标，负责运营和维护海法的新港口，为期25年。新海法港口预计在2021年投入运营。以色列目前有两个关键的新港口项目，其目标是满足经济发展需求，实现港口行业的良性竞争，从而使公众受益，同时也与全球各地大多数港口的运营模式保持同步。以色列港务局将这两个项目授予中国企业，表明以色列对中国建筑公司非常有信心。

#### 4. 房地产:

1. 北京建工集团有限责任公司与Karaso房地产公司签署了一份合约，负责建设6幢30层摩天大楼的742个住宅公寓。北京建工集团目前已经建造了129个公寓以及20,000平方米的地下停车场。该集团是被以色列建设部批准的6家中国建筑企业之一。

2. 以色列建筑公司 Tedhar 集团与中国建筑工程总公司（CSCEC）签署了一份战略合作协议。Tidhar集团是以色列最大的私人房地产集团和承包公司。此合作将通过中国建筑工程总公司的子公司中国建筑第二工程局（CCSEB）来实施。根据该协议，双方将合作在以色列建造数千个住宅，相关施工已经开始，另外还有其他一些项目，这些项目总价值为 15亿新锡克尔。

3. 以色列建设和住房部已经批准了如下5家中国建筑企业：北京建工集团有限责任公司、江苏省第一建筑安装有限公司、光大国际建设工程总公司、江苏南通二建集团有限公司、中国华西企业有限公司，允许这些公司在以色列进行施工。这些企业将有权在以色列建造住宅，以及管理住宅建设项目，并负责项目的所有工程和性能问题。上述政策将使6,000位外籍工人



foreign workers to the Israeli building industry. Under the agreement, each company will receive a permit to employ up to 1,000 foreign workers in wet jobs (building frames and construction work). The foreign companies will be registered for only five years, with a possible three-year extension at the discretion of the Ministry of Housing and Construction agencies authorized for this purpose. The purpose of the measure is to supply the great demand for housing and enhance the use of industrialized construction.

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The information provided in this document cannot cover all planned projects. It is aimed at highlighting some of the bigger projects as well as underlining the potential of the Israeli market for Chinese construction and energy companies.

We will be happy to keep you abreast of opportunities which may be relevant to your clients as these present themselves.

*This memo is intended to serve as a general overview and does not constitute a replacement for legal counsel on the matters discussed herein.*

进入以色列建筑行业。根据协议，每个公司都拥有一份许可，可以雇佣不超过1,000 外籍工人从事技术性工作（搭建架构和施工工作）。外国企业只能注册五年，到期之后由建设和住房部的下属授权机构决定是否可以延期三年。本政策的目的是满足以色列较强烈的住房需求，并推动工业化建设。

\* \* \*

本文中的信息并未包含所有计划内的项目。本文的目的是择要介绍一些较大的项目，并重点说明以色列市场可以为中国建筑和能源企业创造的发展潜力。

在出现与您客户相关的新发展机会后，我们很愿意随时告知您。

本备忘录只是综述信息，不能取代针对所述事务的法律建议。

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