



OCEAN
THERMAL
ENERGY
CORPORATION

PURE. CLEAN. POWER.

Seawater District Cooling: Air Conditioning that is Environmentally Friendly AND Saves Money

October 2011

Contents



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PRESENTATION

- OTE: A Sustainable Company
- Overview
- Locations
- Partners
- Customers
- Why SDC in the Bahamas?
- Seawater District Cooling
- SDC: How it Works
- Project Approach:
Pipeline Installation
- SDC/LSC Commercial Operations
- Benefits of SDC in the Bahamas
- Baha Mar SDC Plant
- Competitive Advantages
- OTE Services
- Near Term Deal Pipeline
- Contact Information

APPENDIX

1. Senior Management

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OTE Corporation: A Sustainable Company



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Three mega-trends that we follow...help direct our research and development efforts to produce technologies to meet the world's greatest challenges



Growth of Developing Nations with Massive Infrastructure Needs



Rising and More Volatile Energy Costs



Increasing Water Scarcity

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OTE Overview



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Ocean Thermal Energy Conversion (OTEC) -> affordable base-load renewable energy production
Seawater District Cooling (SDC) -> chilled water to communities and industry for air conditioning

- With over 20 years experience, Ocean Thermal Energy Corporation (OTE), is a private US, renewable power generation company. Its wholly owned subsidiary was incorporated in 1998 and is internationally recognized as the leader in OTEC and SDC
- OTE plans to **build, own and operate** renewable energy systems based upon the principles of OTEC and/or SDC systems
- OTEC is a **technically feasible and proven** method of generating **clean base-load electricity and potable water** by converting power from the natural temperature gradient of the ocean
- SDC systems reduce the consumption of electricity by as much as 90% when compared to conventional cooling processes. This is done by deriving chilling capacity from the virtually unlimited natural resource of deep ocean/lake water rather than from an electric chiller

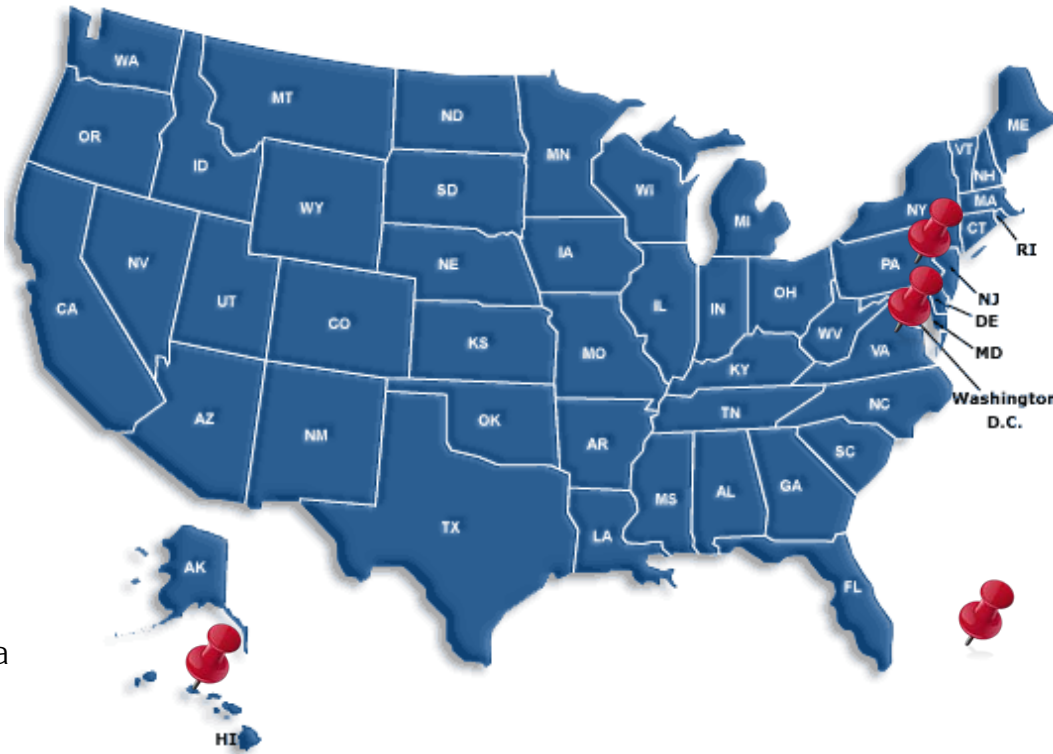
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Locations



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800 South Queen Street
Lancaster, PA
17603, USA

- Corporate
- Treasury
- Sales & Marketing

To be opened:
Northern Virginia, USA

- Technical
- Legal
- Finance and Accounting

To be opened:
West Bay Street
Nassau, Bahamas

- SDC
- OTEC
- Potable & Bottled Water
- Aquaculture

Seven Waterfront Plaza
500 Ala Moana Blvd
Suite 440
Honolulu, HI 96813, USA

- Engineering
- Pacific Rim Operations
- Research & Development

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Partners



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OTE and its partners have unrivalled experience in ocean engineering, construction and project finance



RAYMOND JAMES



HOLOWESKO PYFROM FLETCHER

Counsel & Attorneys-at-Law



HDR



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Customers



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OTE's customers include the US Department of Defense and the US Department of Energy

- **Baha Mar Resort**
Nassau, New Providence, Bahamas
- **Bahamas Electricity Corporation**
Nassau, New Providence, Bahamas
- **Lockheed Martin Corporation**
Manassas, Virginia, USA
- **US Dept. of Defense**
Washington DC, USA
- **US Dept. of Energy (SBIR)**
Washington DC, USA
- **Dept. of Public Works, US Naval Facilities Command**
Hickam Air Force Base
Pearl Harbor, Hawaii, USA
- **Office of Naval Research**
Washington, DC, USA
- **Dept. of Business, Economic Development and Tourism (DBEDT)**
Honolulu, Hawaii, USA
- **Kyo-Ya Management Corporation**
Honolulu, Hawaii, USA



U.S. DEPARTMENT OF
ENERGY

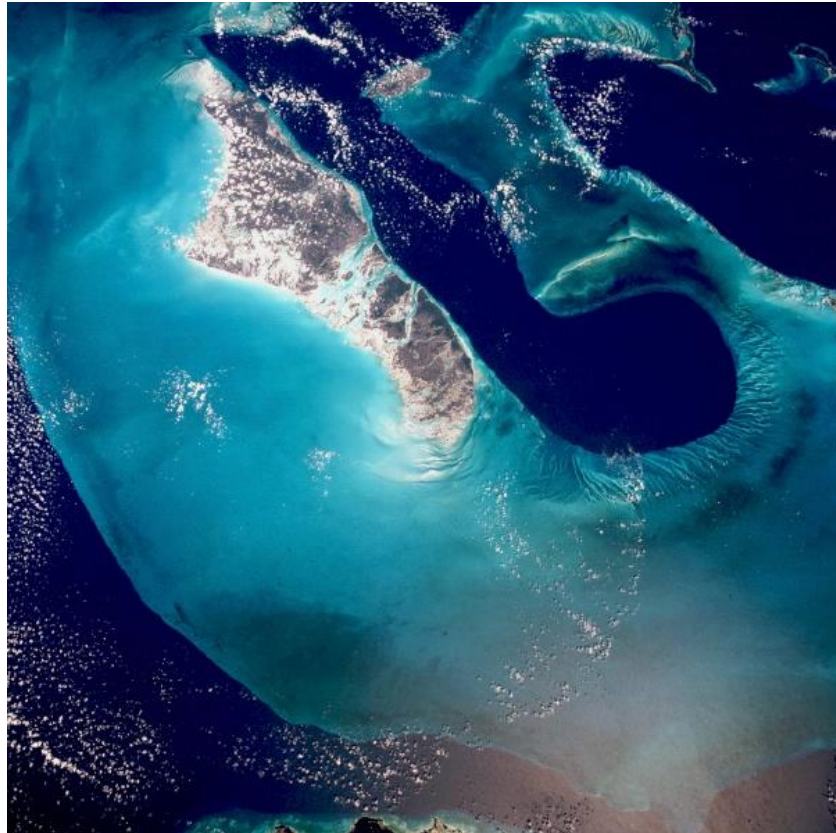


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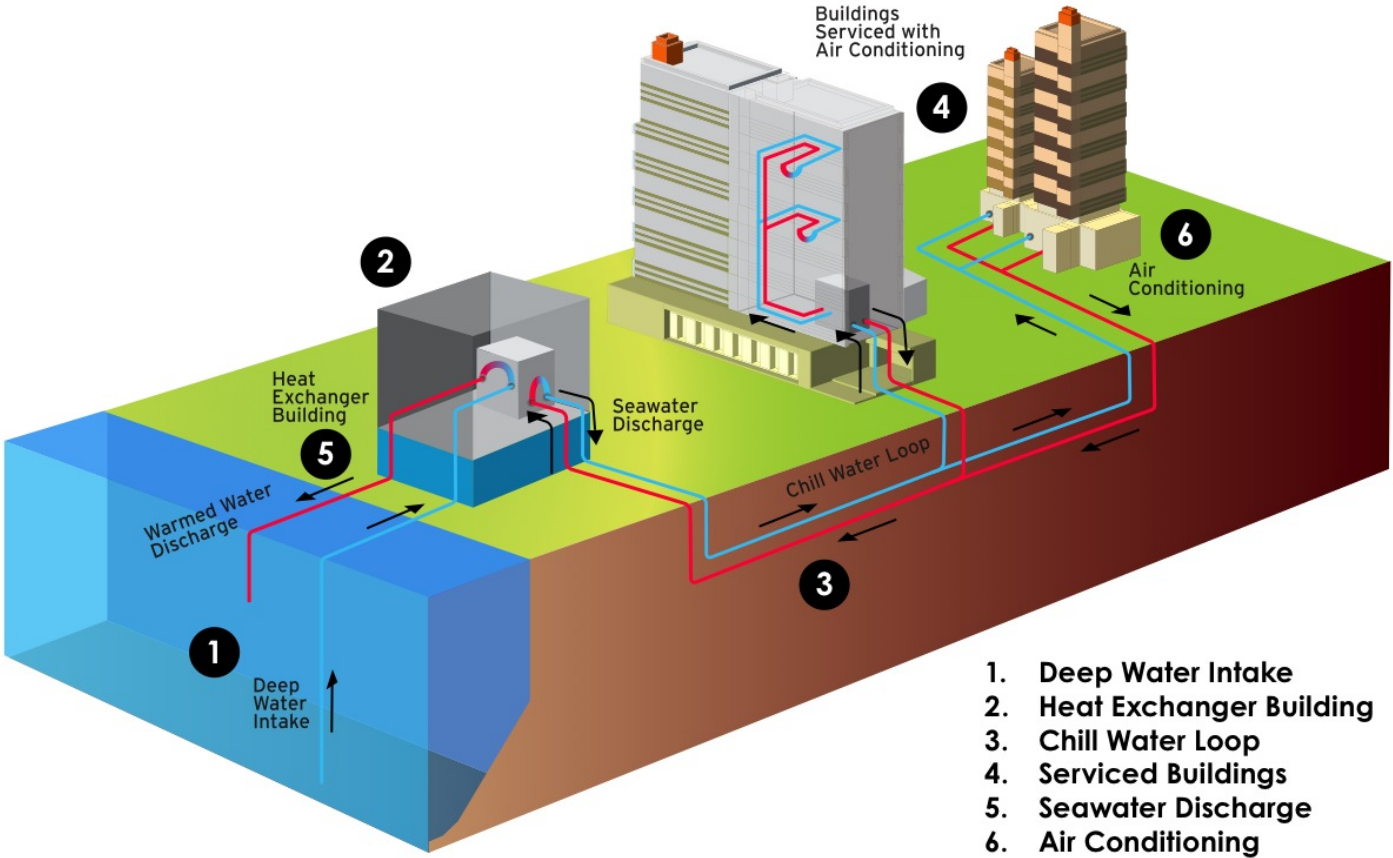
Why SDC in the Bahamas?

- Quick access to deep cold seawater at chill water temperatures
- Large centralized load – eliminates need for complex distribution system
- Relatively high electricity rates
- High utilization rate of the air conditioning load
- Ample space for the heat exchange facility



Seawater District Cooling

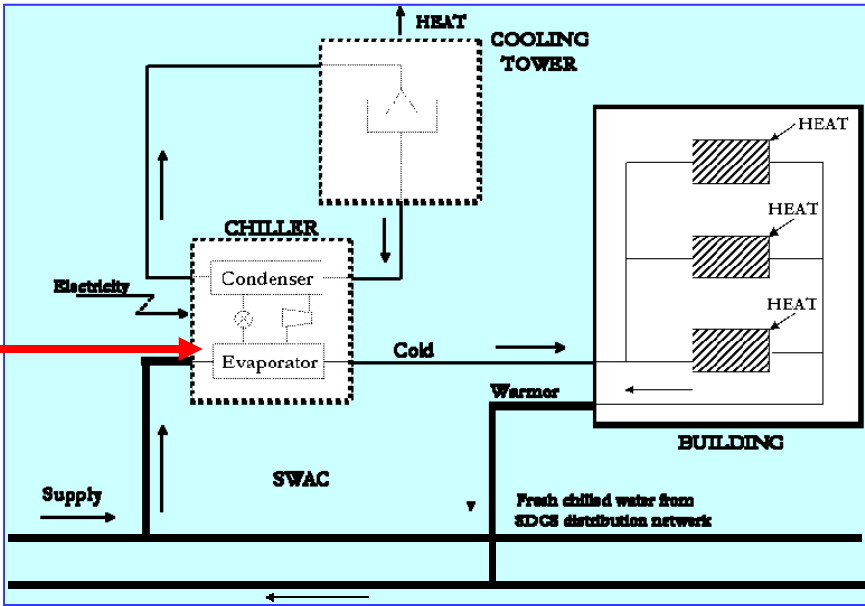
SDC systems are in place and operating at various locations throughout the world. They can save up to 90% in electricity costs when compared to traditional HVAC systems. SDC systems range in size from 450 to 80,000 tons of cooling capacity



SDC: How it Works

Commercially operational and available technology

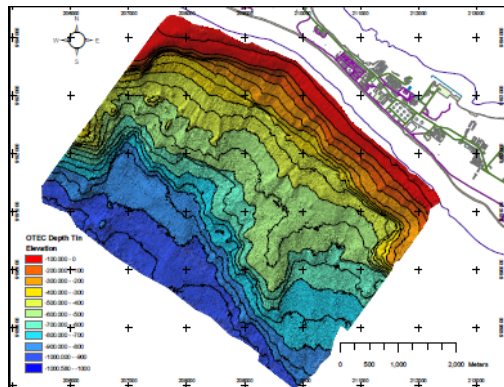
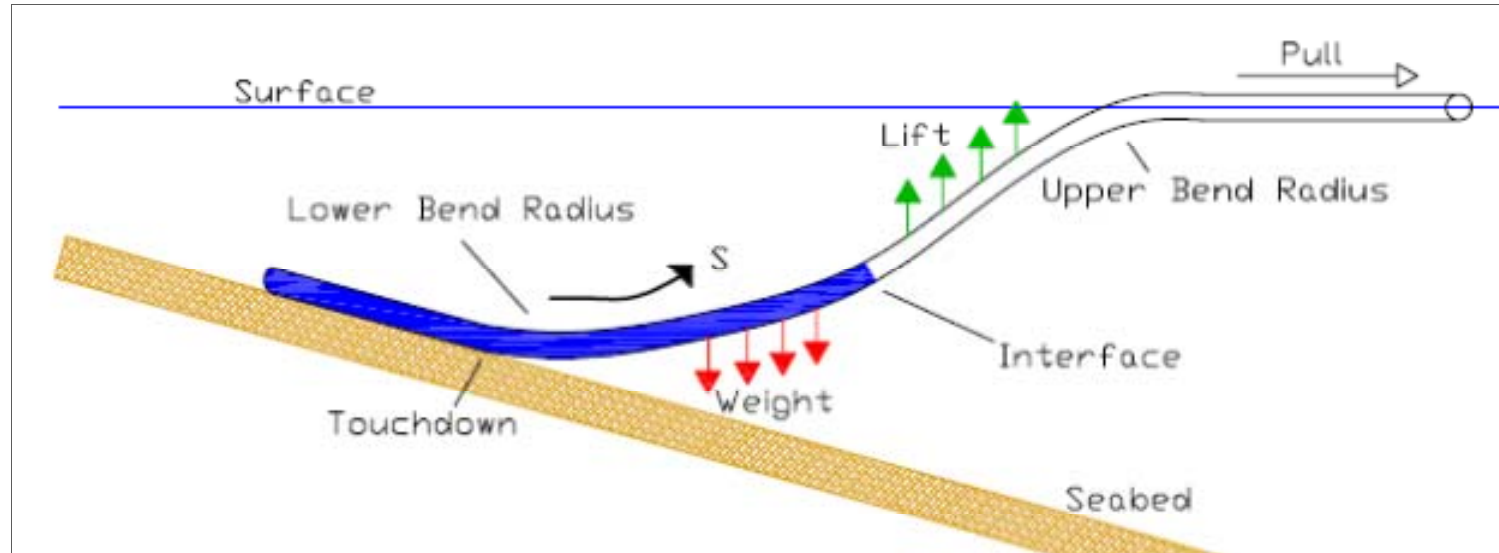
Heat exchangers replace electric chillers!



Saves up to 90% of electricity required for air conditioning serviced load

Project Approach: Pipeline Installation

Controlled Submergence



Project Approach: Pipeline Installation

- Delivered by manufacturer in 500 meter lengths of extruded HDPE
- Assembled then towed into place
- Once assembled – deployed in one day!



SDC/LSC Commercial Operations



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*Hawaii - pilot scale operating, 20,000 tons planned • Stockholm - 80,000 tons
Cornell University - 20,000 tons • Toronto - 54,000 tons • Bora Bora – 450 tons*

- **1986 – Purdy’s Wharf, Nova Scotia, Canada** – Air conditioning of a 350,000 sq ft office complex. The pipeline draws water from only 100’ depth offshore (cold water at surface). Still operational
- **1986 – Natural Energy Laboratory of Hawaii Authority (NELHA)** – Using the cold seawater supplied by the deep ocean water used for OTEC research and now aquaculture support, the research and support buildings continue to be cooled by seawater
- **1995 – Stockholm, Sweden** – Using seawater (surface) in several district loops supplying air conditioning replacing approximately 60 MW capacity
- **1999 – Cornell University** – Supplies approximately 20,000 tons AC to Cornell campus utilizing deep lake water (approximately 200 feet) from Cayuga Lake
- **2004 – Downtown Toronto** – Utilizes deep water (200+ feet) from Lake Ontario via 3 - 63” pipelines to service 54,000 tons of air conditioning
- **2004 – Intercontinental Hotel in Bora Bora, French Polynesia** – Provides 450 tons to the resort for air conditioning and spa activities



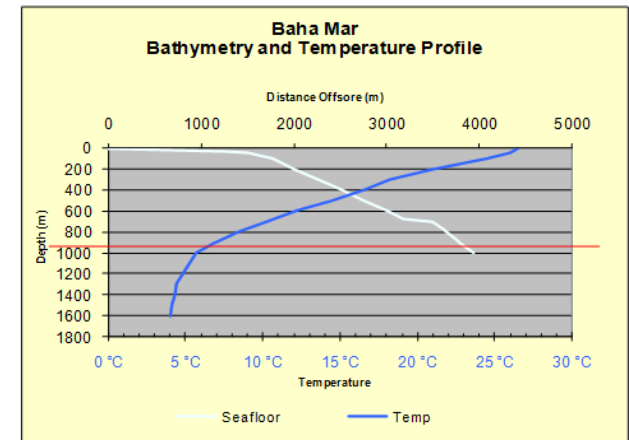
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Benefits of SDC in the Bahamas

OTE estimates its SDC system will reduce Baha Mar's energy consumption by approximately 8 MW saving BEC ~58,000 bbl oil per year while saving Baha Mar millions of dollars over a 30 year project life

- SDC and Lake Source District Cooling (LSDC) provide chilled water to communities and industry for air conditioning and process cooling
- OTE's SDC/LSDC systems reduce the consumption of electricity by as much as 90% when compared to conventional cooling processes - ~35,000 MWh per annum saved
- Improved building space utilisation
- SDC systems typically also reduce on-going operation and maintenance costs through the removal of chiller plants and associated equipment
- Reduced energy consumption means reduced CO₂ emissions - ~58,000 bbl oil saved (~ 26,000 ton CO₂) per year
- Reduced refrigerant usage further reduces environmental pollution
- Improved skyline through the removal of roof top chiller plants and cooling towers
- Reduced noise pollution with the removal of chiller plants from individual buildings
- Savings of potable water up to 115 million gallons per year, savings of sewage/wastewater up to 55 million gallons per year



Baha Mar SDC Plant



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BAHAMAR
NASSAU, THE BAHAMAS

OTE is building the first seawater district cooling facility in the Bahamas for the Baha Mar resort

- Agreement signed with Baha Mar to build, own and operate a 12,000 ton SDC system with expected commercial operation date January 2014
- OTE estimates its SDC system will reduce Baha Mar's energy consumption by ~58,000 bbl oil (equivalent to ~ 26,000 ton CO₂) per year which will save Baha Mar over 25% of AC costs compared to a traditional HVAC system over the 30 year project life
- DCO Energy to be lead EPC contractor
- Total project costs approximately \$100 million



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Competitive Advantages

Vacationers Want Green Choices

- It is well-established that a rapidly growing segment of consumers insist that their dollars are spent to support sustainable and socially responsible products and services.
- According to the 2010 Report on Socially Responsible Investing Trends in the United States, “At the start of 2010, professionally managed assets following SRI strategies stood at \$3.07 trillion, a rise of more than 380% from \$639 billion in 1995...Over the same period, the broader universe of assets under professional management increased by only 260% from \$7 trillion to \$25.2 trillion.”
- This general continuing consumer trend is equally applicable to the tourist industry. According to the Wall Street Journal edition of January 28, 2011, “Rediscovering a Sense of Adventure”, “Ethical concerns are also influencing travel decisions, as people seek out new and inventive forms of eco-tourism that combine a modern sense of luxury with a green ideology.”
- By embracing the SDC technology, the Bahamas hotel industry can effectively and profitably distinguish itself from its competition by advertising the fact it is using deep ocean water in an environmentally and socially responsible manner to meet their air conditioning needs. And they are leading the “green” revolution in the Caribbean.

OTE Services



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OTE's customers include the US Department of Defense and the US Department of Energy

- OTE technologies are environmentally beneficial and provide a number of humanitarian benefits
- Seawater district cooling applications can reduce the energy consumption of a traditional air conditioning system by as much as 90%
- OTEC is a technically feasible way to generate sustainable base-load electricity by converting power from the natural temperature gradient of the ocean
- Readily available and plentiful supply of potable water
- Deep ocean water is mineral and nutrient rich which can be used for aquaculture and cold-water agriculture
- OTE has proprietary technology offering significant cost savings with our SDC applications and fossil-fuel free electricity with our OTEC applications
- Opportunities for aquaculture and agriculture - economic developments
- Opportunities for premium deep ocean bottled water
- Reduced CO₂ emissions enhance customers' green credentials
- Ability to finance large scale projects































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Near Term Deal Pipeline

OTE is in advanced discussions to build, own and operate SDC and OTEC plants. Within the next 12 -24 months OTE expects to obtain MOUs, Term Sheets and ESA/PPAs with 8 Major Customers

		Now	<6	6 - 9	12 - 24
Baha Mar, Bahamas	12,000 ton SDC system				
BEC, Bahamas	2 x10 MW OTEC plants + potable water + aquaculture				
CUC, Cayman	10 MW OTEC plant + potable water				
US Virgin Islands	10 MW OTEC plant + potable water				
Barbados	10 MW OTEC plant + potable water				
HECO, Hawaii	5 MW OTEC plant				
Kwajalein Atoll, US	5 MW OTEC plant + potable water				
Guam	5 MW OTEC plant + potable water				
Dominica, Dominican Republic, Guadeloupe, Jamaica, Martinique, Saint Lucia, Tanzania, Tobago, and Tonga					

 In Discussions	 Memorandum Of Understanding	 Firm Offer Term Sheet	 Energy Services Agreement/PPA
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Contact Information



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APPENDIX

1. Senior Management

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Senior Management

Jeremy P. Feakins

Chairman and Chief Executive Officer

Jeremy is an ardent supporter of environmental and sustainability issues and has over 25 years of experience as a successful entrepreneur and investor. He has been the founder of two technology-based companies whose products quickly found market traction and success. From 1990 - 2006 Jeremy was the Chairman and CEO of Medical Technology & Innovations, Inc. (MTI). Under his leadership, MTI developed and manufactured a first to market microprocessor based vision screening device. In 1996 Jeremy managed the public listing of MTI and subsequently structured the sale of the rights to MTI's vision screening product to a major international eyewear company. From 1998 - 2006 Jeremy was Managing Member of Growth Capital Resources, LLC where he successfully managed the public listings for IP Voice Communications, Inc. (IPVC), Care Recruitment Solutions, Inc. (CRSX) and China YCT International, Inc. (CYIG). From 2005 - 2008 he served as Executive Vice Chairman and member of the Board of Directors of Caspian International Oil Corporation (CIOC) where he managed the public listing. Jeremy is the Managing Partner of the JPF Venture Fund 1, LP an early stage investor in companies involved with sustainable and humanitarian projects. He is a member of the Institute of Directors (UK) and the British American Business Council (USA).

Dr. Stephen K. Oney, PhD

Director and Chief Science Officer

Dr. Oney is President and co-founder of OTE's wholly owned subsidiary, OCEES International, Inc. He has 25 years of experience in ocean engineering. He is well published on the subject of OTEC and SDC. His vast knowledge places him as one of the world's foremost OTEC and SDC experts where he has been called upon

to deliver lectures on the subject. Dr. Oney has hands-on experience of OTEC and SDC design and was integral in the research which led to the development of the first OTEC plant.

Dr. Ted Johnson, PhD

Senior Vice President OTEC Programs

Dr. Johnson was formerly the Director responsible for Alternative Power solutions at Lockheed Martin ([NYSE: LMT](#)) and in charge of their OTEC program. The [Ocean Energy Council](#) (OEC) recently honored Dr. Johnson, with its Ocean Energy Pioneer award for his support and contribution to OTEC technology. Dr. Johnson is a member of the OEC's Board of Directors.

James D. Greenberg

Director and Chief Marketing & Strategy Officer

Jim is an experienced U.S. lawyer and a skilled business executive. Jim has practiced law since 1986. From 2000 - 2009 he was Managing Partner of the Law Firm of Katherman, Briggs and Greenberg where he was responsible for the business development and a doubling of the size of the practice. He has served on business and not for profit Boards of Directors. He is a member of numerous professional organizations.

Edward M. Baer

Director and Chief Financial Officer

Ed has more than 30 years of senior financial management experience starting his career with Arthur Andersen. From 1971 - 1993 Ed was the Chief Financial Officer of the American Cancer Society. From 1993 - 2009 Ed was the Founder and Principal of the Investment Banking firm Marston Group.

Senior Management (continued)

Fernando Gonzalez*Senior Vice President of Finance*

Fernando brings more than 16 years of professional executive and financial expertise from his senior appointments with a Big Four Accounting Firm (Arthur Andersen), Fortune 500 organizations and Private Equity backed start-up companies. From July 2008 to January 2011 Fernando served as Executive Vice-President and Chief Financial Officer for ContourGlobal, an international power company that develops, acquires and operates electric-power and district-heating resources around the world. From 2001 to 2008, at The AES Corporation, a global power company with operations in 29 countries, Fernando was Regional CFO for Europe, CIS and Africa; and Director of the Restructuring Office and Office of the Integrated Utilities. His work included major assignments and projects in Europe, Latin America and the United States.

Neil Anthony Sims*Director of Sustainability*

Neil is a marine biologist who has dedicated his professional and educational life to the sea. Neil is the co-founder and VP of Research for Kampachi Farms, a successful aquaculture operation in Hawaii. He has led research into hatchery production and mariculture for a broad range of overfished species. Neil co-founded a pearl oyster hatchery company that restored native stocks and foster pearl farming in remote islands and regions. Neil also served in research and consulting roles to companies, governments and international agencies around the globe, focusing on feasibility, development and environmental impacts of mariculture. He is the founding President of the Ocean Stewards Institute which is the open ocean mariculture trade association that advocates for the balancing of rational, responsible development of the open oceans with protection of marine

resources and habitats. Neil is a frequent speaker on marine conservation and responsible mariculture issues. He has published dozens of papers and reports on offshore net pen culture and pearl oysters. He earned his B.S. degree in Marine Biology from James Cook University of North Queensland, Townsville, Australia and an M.S. in Zoology from the University of New South Wales.

Gerald S. Koenig, Esq.*General Counsel & Director of Government Affairs*

Gerald is a U.S. lawyer with over 25 years of international legal, business and government expertise. He has specialized knowledge and experience in federal contracting, domestic and international government relations, financing and information technology. His previous government experience includes service as a member of President Ronald Reagan's White House Staff and he has also served as a helicopter pilot with the U.S. Army.

Sheldon Hunt PE*Senior Project Operations Consultant*

Sheldon is a certified Professional Engineer in Hawaii with over 20 years experience in the Pacific region within the utilities, energy and environmental sectors. Sheldon has conducted feasibility studies for the Waikiki sea water district cooling project and worked with OTE Corp/OCEES on the Diego Garcia OTEC utility service contract proposal for the US Navy. Until joining OTE Corp/OCEES in January 2011, Sheldon served as the Senior Army Energy Advisor for the Pacific Region through a Department of Energy contract arranged by the Pacific Command (PACOM).