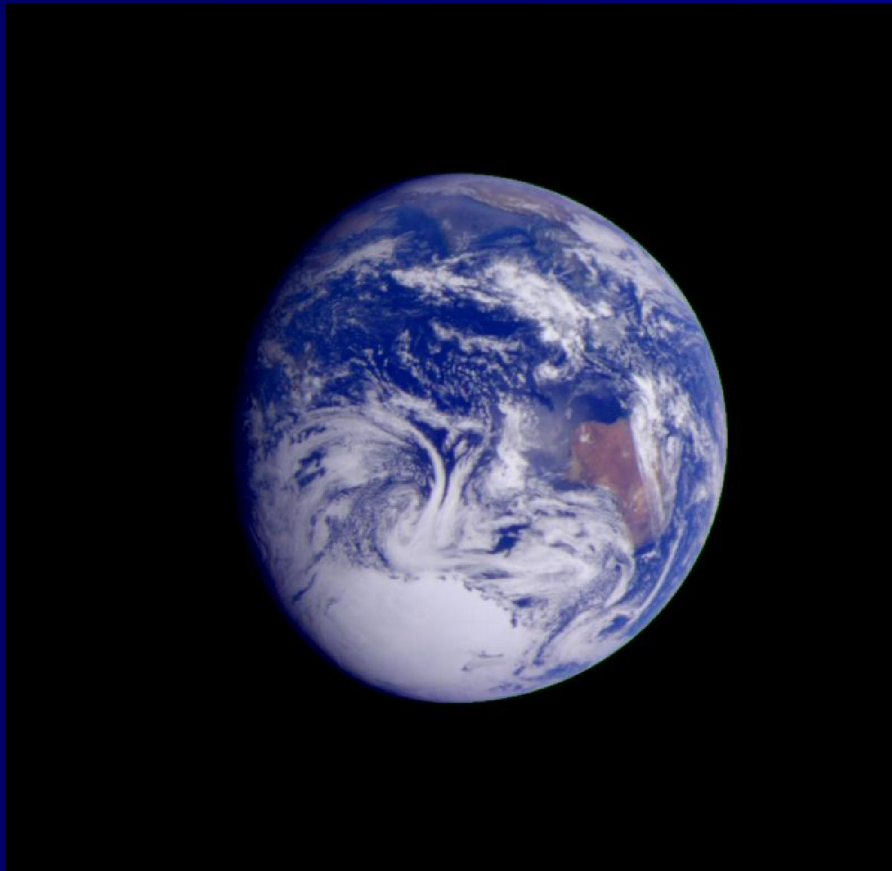


LARGE & SMALL ENERGY SOLUTIONS GLOBAL & LOCAL

DR. HARINDER (HARI) LAMBA
President, Renewing Technologies, Inc.
Manager Advanced Technology, EMD, Inc.
IDCA Conference, October 2012

Our Life Sustaining Planet Earth

(Courtesy NASA/JPL – Caltech)



- Non-Denominational Prayer
- Thanks for this life giving planet
- May I enjoy what I seek to protect
- Thanks for this life giving Earth
- Which I will protect for my survival

What Can I Do ?

Renewing Technologies, Inc
Energy for Tomorrow

SOME SELF HISTORY

- 1984-1990 – India Development Service (President – 1989)
- 1992 – EARTH SUMMIT NETWORK
 - Promoting awareness of Global Warming, problems & solutions
 - Applying pressure on senior Bush Administration to be more flexible at Global Warming negotiations
- **1993 – Started 12 years of self education**
- **2005 – Finally was successful in publishing book**
 - **“Rethinking Progress – Towards a Global Transformation of Global Society,” Daanish Books, New Delhi, 2005**
 - **A comprehensive analysis of global problems**
 - **A comprehensive approach to solutions – Global Transformation**
- **DO SOMETHING !**
- **2007 – Formed new Company – Renewing Technologies, Inc.**
- **2008-2010 – Giving talks on Global Energy Solutions**
- **2009-2010 – Solar Lights projects – IDCA & IDS – Off grid villages**
- **2012 – Company – RTI – Trying to provide Energy solutions – large & small**
- **2012 – Booklet of Poems, “Our Only Home – Poems for our Planet Earth”**

ENERGY & CLIMATE CHANGE

- ENERGY – Wikipedia
 - World fossil fuel use grew by an average of 2% annually – 1986 – 2006
 - 2004 – fossil fuel supplied 86% of world's energy
 - Fossil fuel use continues to grow
- GLOBAL WARMING SYMPTOMS – US
 - Heat – 2012 – One of the hottest summers
 - Wildfires in western US – One of the worst years
 - West Nile Virus – tropical diseases growing in the US
 - Increasing ferocity of Natural Disasters – hurricanes & tornadoes
 - Agriculture zones shifting north
- GLOBAL WARMING – INDIA
 - Each summer gets hotter than the last
 - Severe effects expected on agriculture, monsoon and climate
 - Glaciers, hydrological cycle, rivers, being affected
 - Massive rain in short time – e.g. Mumbai floods

ENERGY SOLUTIONS

- Lets say CO2 in air needs to stabilize at 350 ppm (350.org)
- How can we get there ?

- **THREE MAJOR PARTS**
- 60% from Energy Efficiency
- 20% from Renewable Energy
- 20% from Bio-fuels (non-agric) and waste to energy

WALKING THE TALK

- **“Talks are good, BUT WHY DON’T YOU DO SOMETHING ?”**
- **Renewable Energy for Off grid villages – now on low energy use**
 - Dr. Tata, Mr. Jiwan Sondhi, IDCA, IDS, Rotary, TERI
- **Offer PRACTICAL Business solutions – Start and operate a new company**
- **Renewing Technologies, Inc. (RTI)**
 - Later Mr. Ramesh Trivedi joined RTI–VP & Dir. Tech

ENERGY EFFICIENCY

(Main solutions are political)

- **USE LESS ENERGY FOR SAME TASKS**
 - Use less and then generate some.
- **Transportation – Auto, air, rail, & bike**
 - Integrated Transportation Infrastructure
 - All segments – low carbon – re-design to provide transportation choices
- **Buildings – Homes, Business & Industry**
 - All new homes should be more energy efficient and net energy producers
 - New Business, Commercial & Retail Buildings - Mandatory LEEDS type standards
 - Industry – incentives – more energy production on site

Large Scale Renewable Energy

- **THE FUEL IS FREE !!**
- **Solar PV – Electric**
 - Homes, businesses, industry & utility scale
- **Solar Thermal – hot water & space heating**
 - Fast rate of return – cost effective today
- **Geothermal – Using constant temperature of ground**
 - Uses 25% of energy of efficient air-conditioners
- **Wind energy – horizontal axis – large scale – farm areas**
 - Vertical axis – can be used near or on homes
- **SOLUTIONS OFFERED by RTI**
- **Site Survey Services – How much energy & benefits**
- **Work with certified contractors to implement for you**

Small Scale Renewable Energy & Energy Saving Devices

- **PRODUCTS OFFERED BY RTI**

- www.renewtechs.com

- **LED Bulbs – save you money – more energy efficient than CFLs**
- **Solar Driveway Lights – Developed by RTI**
- **Solar LED Pathway Lights – Much brighter than garden lights**
- **Emergency power kit - 80 Watt Power Kit – Batteries – Four (4) 110 VAC outlets**
- **Small Solar/Electric charged Lantern – small NiMH batteries**
- **60W LED Street Light – Save big on electricity**

- **CURRENT PRODUCT DEVELOPMENT**

- **Solar Security Light – brighter & w/motion detector**
- **60W LED – Solar/Wind Hybrid Street Light**

SO WHAT CAN I DO ? (Nationally)

- **GET POLITICAL**
- **Apply pressure at Federal Level**
 - **Global Warming Treaty**
 - **This will reduce demand for fossil fuels & lower prices**
 - **PTC - Pass the Renewable Energy Production Tax Credit**
 - **Pass mandatory Energy Efficiency Laws**
 - **Rebates & Renewable energy tax credits for all people**
 - **National and Global Carbon Tax – use the money for new energy production and for global warming**
- **Ask your municipality or school to use LED street lights and hybrid wind solar street lights – use solar and wind systems**

SO WHAT CAN I DO ?

- **Make yourself Energy Efficient !!**
 - Demand high car mpg – hybrid, etc.
 - Use LED lamps
 - Demand highest efficiency furnaces and air conditioners
 - Demand 16-21 SEER Efficiency Air Conditioner
 - Demand 90-95% AFUE (Efficiency) Furnace
 - Demand the highest efficiency appliance – ask for it !
- **Use and generate Renewable Energy**
 - RTI provides site survey services for larger systems
 - State Rebates & Federal Tax Credits
 - Use small scale solar lights – 100% Energy Efficiency

Solar Driveway/Porch Light RTI "Night-watcher"



What Can I Do ?

Renewing Technologies, Inc
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Hybrid Solar/Wind LED Street Light (Downers Grove – not RTI)



What Can I Do ?

Renewing Technologies, Inc
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WHAT DO WE NEED EVENTUALLY ?

- **Global Transformation in Everything we do !**
 - Energy, transportation, habitats, industry, agriculture, forestry, fisheries, etc. – outlined in my Book
 - **Restore the Life Support Systems of the Planet – Warming, Ozone,**
 - **Repair and rejuvenation of our global eco-systems – forests, coral reefs, glaciers, coastal ecosystems, etc.**
 - **De-poisoning of the global environment**
 - Toxic and hazardous wastes
 - Radioactive wastes
 - Municipal wastes, etc.
 - **Stem the rapid extinction of species**
- End by saying:**
- **Do things politically and individually**
 - **Food for your mind – read my Book**
 - **Food for your heart – read my booklet of Poems**
 - **Actually use – RTI & similar products**

LET'S ENJOY OUR PLANET & HARMONIZE WITH THE REST OF NATURE

The beautiful Lamba garden



What Can I Do ?

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