



Regional Clean Technology Cluster Development

Presented By: Ingrid Rosten
Executive Director
SARTA's
CleanStart and McClellan Technology Incubators



CleanStart
SUPPORTING CLEAN ENERGY VENTURES

Ingrid Rosten

- **Executive Director and Manager, CleanStart, GreatStart Mentorship Program and McClellan Technology Incubator**
- **Sr. Consultant, Innovative Partners, Inc. – Business incubation development, cluster development, management consulting, venture advising and management**
- **Green Capital Alliance Member**
- **Co-developer/Manager of 10 business incubator/ high-tech business-development centers**
- **Consultant to economic and real estate developers – countries, states, counties, cities, private industry**
- **Invited speaker internationally and presenter to over 300 visiting delegations**

What's the New Energy We're Hearing About?.....Clean Energy (CET) or Renewable Energy

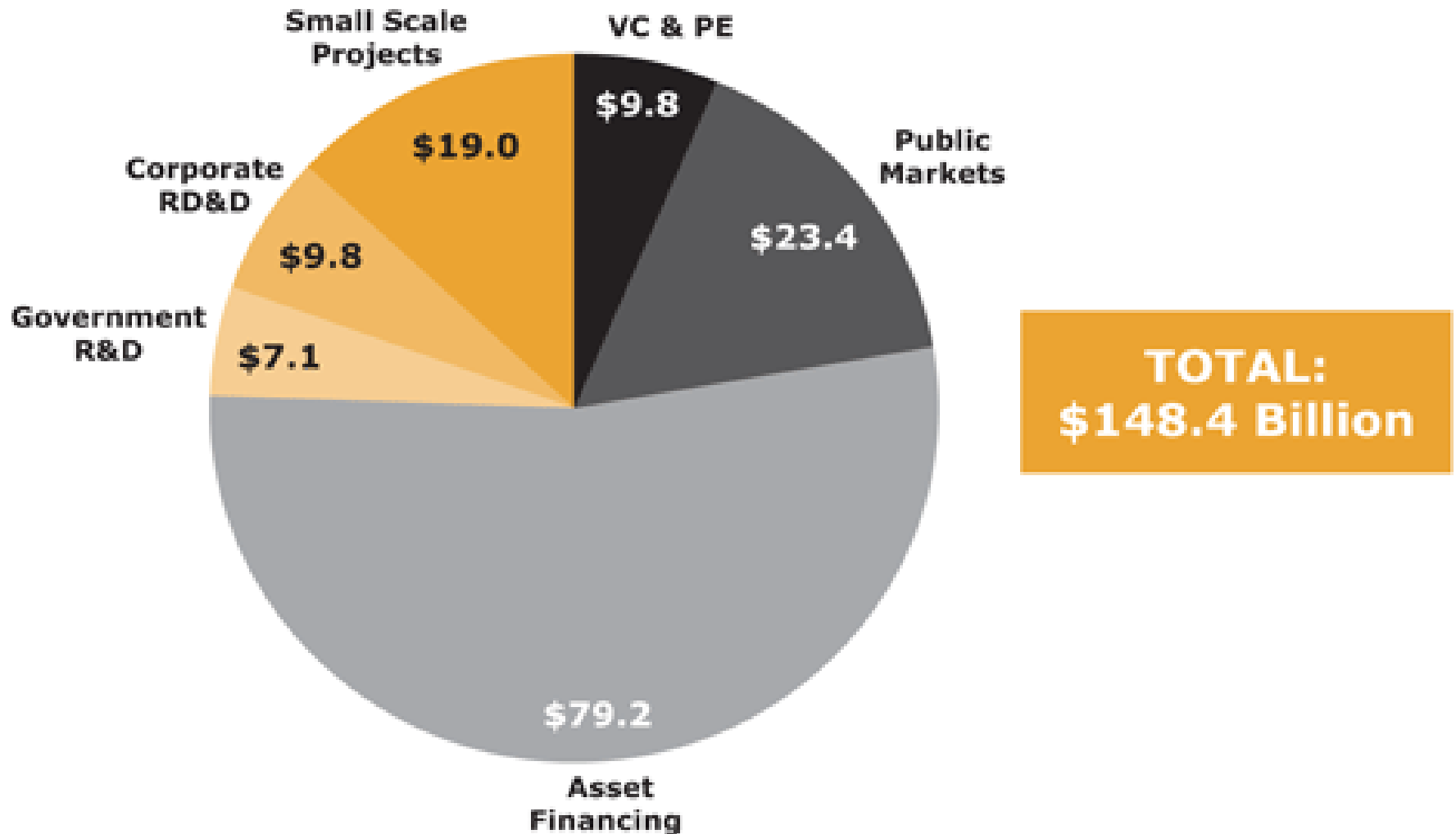
- **Biomass**
- **Geothermal**
- **Solar**
- **Wind**
- **Water**
- **General Energy Efficiency**

Clean-Energy Venture Capital Investments in U.S.-Based Companies as Percent of Total

Year	Total Venture Investments (US\$ Billions)	Energy Technology Investments (US\$ Millions)	Energy Technology Percentage of Venture Total
2000	\$105.1	\$599	0.6%
2001	\$40.6	\$584	1.4%
2002	\$22	\$483	2.2%
2003	\$19.7	\$446	2.3%
2004	\$22.5	\$663	2.9%
2005	\$23	\$1,038	4.5%
2006	\$26.5	\$1,555	5.9%
2007	\$29.4	\$2,665	9.1%

Source: New Energy Finance with supporting data from Nth Power and Clean Edge. NOTE: New Energy Finance's energy-tech VC numbers include investment in renewable energy, biofuels, low-carbon technologies, and the carbon markets. VC figures are for development and initial commercialization of technologies, products and services, and do not include private investments in public equity (PIPE) or expansion capital deals.

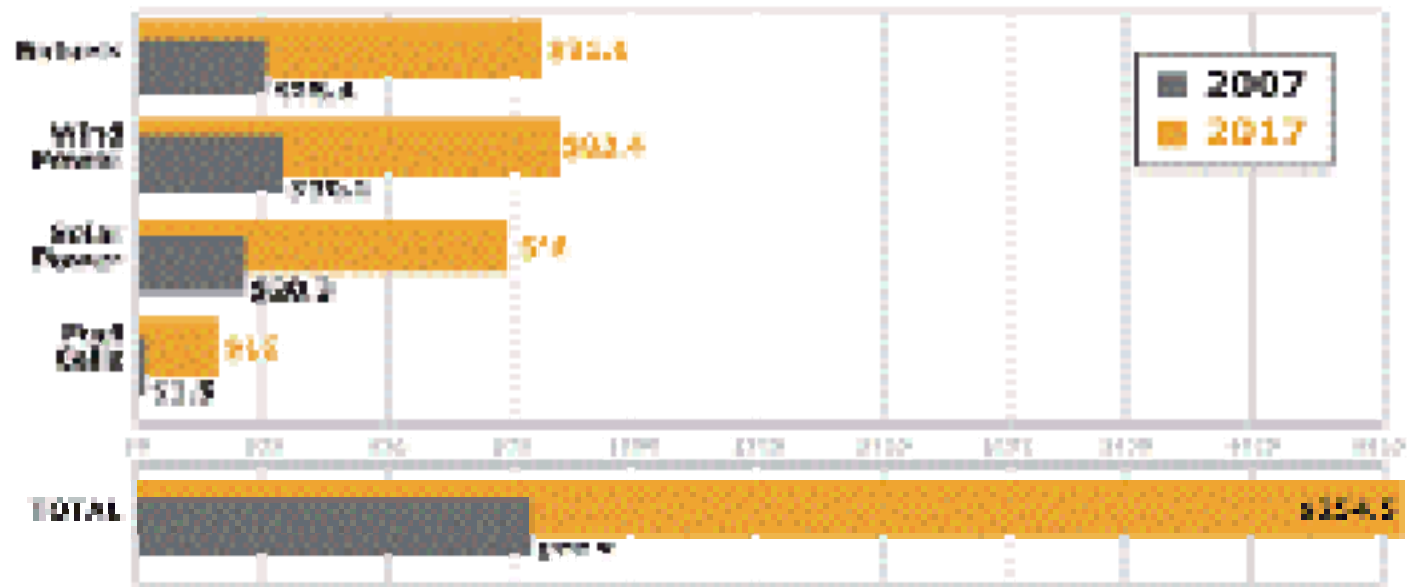
New Global Investments in Clean Energy - 2007 (\$US Billions)



Source: New Energy Finance. NOTE: Asset financing figure includes a downward adjustment of \$5.3bn, reflecting a subsequent reinvestment in projects of VC, PE and public markets funds raised by clean-energy companies. Re-investment assumes a one-year lag.

Projected Growth in Clean Energy

**Global Clean-Energy Projected Growth
2007-2017** (\$US Billions)



Source: ENR, 2008, 2010

Development of CleanStart and the Clean Energy Technology (CET) Sector

- **Vision**
- **Feasibility Study – CEC & SMUD**
- **Business Plan**
- **CET cluster mapped**
- **SACTO attracts CET U.S. Headquarters – (SunTechnics Energy Systems, Schott Solar, Alteryg Systems, Synapsense Corp, Ecostream U.S., Inc.)**
- **PowerUp! Business Plan Competition (20 contestants \$50K)**
- **GreatStart Mentorship Program**
- **Educational programs**
- **Partnership for Prosperity – Created Clean Energy Action Team Green Capital Alliance** –_broadbased coalition of org’s working to accelerate green tech and clean energy in the region. Goals 1. Attract and retain 2. Grow within 3 Create markets and beta test 4 brand region CET hotspot 5 Produe and retain skilled workforce **Green Capital Alliance**
- **Adoption of Resolutions – SacAreaCouncilOfGov’t, Cities**
- **CET CEO Roundtables**
- **Cap to Cap**
- **Sacramento Region Clean Energy Showcases**
- **Workforce development programs – universities**

CleanStart Mission

Stimulate the development and success of early-stage companies who will provide the next generation of clean, renewable, and efficient energy technology. CleanStart will help companies assemble solid management teams, secure adequate funding, and accelerate the commercialization of sound product ideas into the market. Through this mission, CleanStart will create jobs and wealth for the greater Capitol Corridor region and new products to help society be more sustainable.

CleanStart creates jobs and wealth for the greater Capitol Corridor!

Sacramento Region Boasts

- Almost 100 Green/Clean Energy Technology Co.'s Regionally- solar (bloo nano solar), wind (turbines), biofuel (test ctr.), energy efficiency
- World renowned Universities, research institutes and colleges – UC Davis 1. Air Quality Res. Center 2 CA Biomass Collaborative 3 CA Inst Food and Ag 5 CLTC 5. CA wind energy Collaborative 6 Energy Efficiency Ctr 7 ITS, Sacramento State 1 Clean Energy Ctr 2 Interdisciplinary Ctr for Sustainability, 7 Community Colleges incl. Los Rios teaching PV install, etc.
- Innovative Utilities – SMUD (Hydrogen), PG&E (beta), Roseville Electric-generation and other programs are nationally recognized
- Access to State Policy Makers – CA most progressive state on CET, access to legislators and key gov't agencies – CEC, ARB, CAL EPA HQ'd here. SB1 - \$3.5B for solar installs AB32 Caps greenhouse gas emissions. CALPERS & CALSTRS \$250B pension funds (largest in world) initiated an Investment fund of \$500M
- Funding – Venture Capitalists, Angel Investors, Green Bankers
- Local Government – Roseville's Renewable Resource Research Park, Power Inn Alliance, MBP, City of Sac won Solar America Cities award, Sierra College \$470K PV trng
- Shared Vision – Partnership for Prosperity (75 orgs), CalFCP (collaboration 31 co's to promote commercialization of fuel cells, Renewable Energy Institute,
- Business Incubators – MTI, TDC, private for profit

What can you do?

- **Adopt** resolutions to purchase and be green
- **Create** programs around clean tech
- **Attract** experts
- **Locate** new funding sources
- **Buy** and use clean and green products
- **Educate** your workforce
- **Partner** and collaborate with others
- **Recycle** everything
- **Support** entrepreneurs, beta test products
- **Track** your results to utilize in promotion
- **Build** an incubator
- **Rally** the community

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THANK YOU!!!