## *Jobenomics* focuses on mass-producing local businesses and jobs.



Jobenomics Rwanda promotes entrepreneurialism with emphasis on Rwandans who want to start a business or sustainable careers with livable wages.

By: Patience & Richard Emeni
15 November 2019

## **Jobenomics Rwanda**



- Led by Patience & Richard Emeni: United Nations, World Bank, Washington DC and African (borne) experts. Supported by:
  - Chuck Vollmer, Founder and President of the Jobenomics National Grassroots Movement in North America.
  - Dr. Sam Hancock, CEO of Emerald Planet and Emerald TV that has broadcast 2,600 green technology shows worldwide.



L-R: Chuck Vollmer (Jobenomics Founder), Bonny Musefano (Rwandan Embassy Commercial Attaché), **Richard and Patience Emeni (Jobenomics Rwanda)**, and Dr. Sam Hancock (Jobenomics Board Member and CEO EmeraldPlanet.org)

 Official launch at the Embassy of the Republic of Rwanda in Washington DC on 13 November 2019.

The Emenis will spend the next six months in Rwanda to listen to local leaders and build a Jobenomics Rwanda coalition.



## Jobenomics National Grassroots Movement



## **Jobenomics**

## JOBENOMICS Rwanda

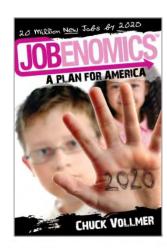
#### **Bipartisan National Grassroots Movement**

- Since 2010, estimated audience of 30 million
- Website averages 30,000 monthly page views
- Jobenomics America TV launched in 2018



#### Books, Research & Special Reports

- Focus on economic, community, small business and workforce development.
- First book established published 2010.
- Ten e-books and ninety special reports.



#### **City and State Initiatives and Programs**

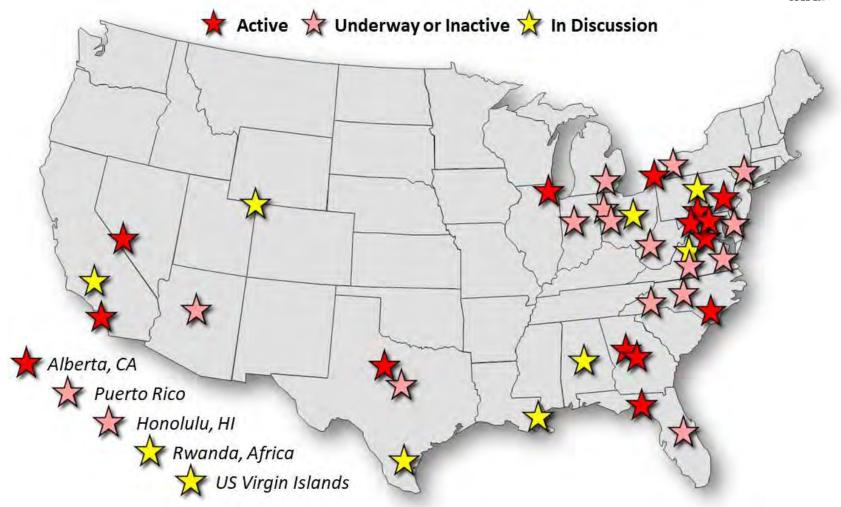
#### Jobenomics.com

- Two dozen state and city chapters led by local community leaders.
- Numerous startup programs implementable within 12-months.

Primary focus: economic, community, small business and workforce development at the base of America's socio-economic pyramid.

## **Jobenomics Chapters**

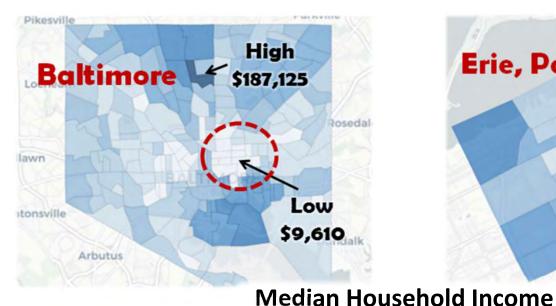


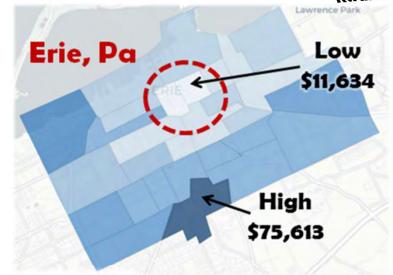


Since 2016, dozens of communities started Jobenomics chapters. While none have implemented highly-scalable programs yet, they are generating significant amount of public and private support.

#### **Jobenomics Underserved Community Emphasis**







# SILVER SPRING Washington, DC COLLEGE PARK Salley's possroads Suitland Heigl Low ALEXANDRIA Oxon Hill Camp Sp

Charleston
High
\$108,446
\$29,086

High
\$66,677
\$24,921

Urban renewal and rural programs for underserved communities.

# A Different Approach To Economic And Community Development



#### Traditional Top-Down Approach





Jobenomics Bottom-Up Approach

## **Economic Development Conundrum**



#### Traditional Top-Down Approach

Attract 1 Large \$100,000,000/year Enterprise



#### Jobenomics Bottom-Up Approach

Start 1,000 \$100,000/year Micro Businesses



Under-resourced communities have difficulty attracting big companies but can mass-produce micro and nonemployer businesses.

## Micro & Nonemployer Businesses





- A micro-business (1 to 19 employees) employ 32 million Americans.
- A nonemployer is a small business with no "paid" employees.
  - 80% of all U.S. businesses with 25 million single-person owners.
  - Growing significantly faster than traditional businesses
  - Owners make substantially more than wage or salaried jobs.

Mass-producing micro and nonemployer businesses is the answer to beleaguered urban communities lacking good-paying jobs.

# Jobenomics Community-Based Business Generator (JCBBG) Concept



#### A JCBBG mass-produces startup businesses by:

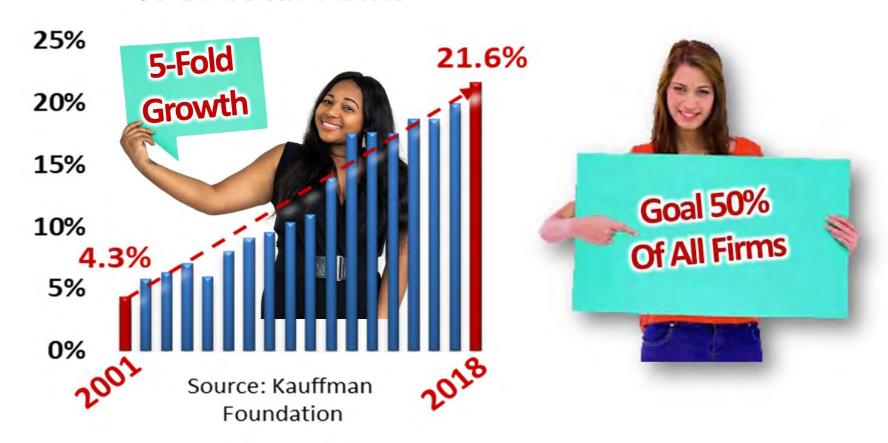
- Working with community leaders to identify high-potential business owners and employees,
- Executing a due diligence process to identify and assess work ad social skills and aptitudes,
- Training and certifying participants in targeted occupations,
- Incorporating highly-scalable small and self-employed businesses,
- Establishing sources of funding and contracts to provide a consistent source of revenue for new businesses,
- Providing mentoring and back-office support services to extend the life span and profitability of new businesses.

Most cities have Business Incubators and Business Accelerators, but not Business Generators for low-income citizens.

## Women-Owned Businesses & Jobs



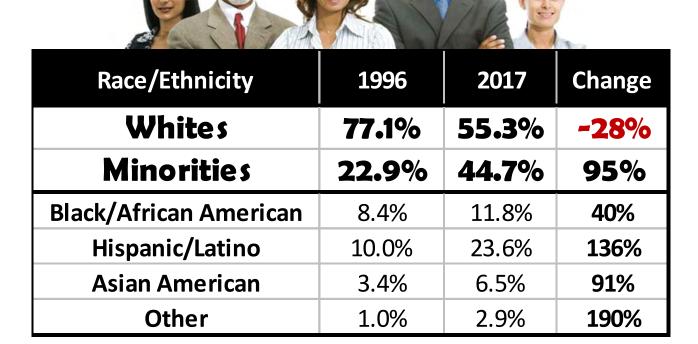
#### % of Total Firms



The percentage of women-founded companies has grown 5-fold since 2001. Jobenomics goal is to keep this trend growing until women own as many firms as men via mass-producing micro and nonemployer businesses.

## Minority-Owned Businesses & Jobs





## Changes In The Share Of New U.S. Entrepreneurs

Source: Kauffman National Report on Early-Stage Entrepreneurship, February 2019

Jobenomics promotes minority entrepreneurship to increase wealth and reduce poverty, crime and welfare dependency in underserved and under-resourced neighborhoods.

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## **Veteran-Owned Businesses & Jobs**



#### An underutilized labor pool of proven workers and talent

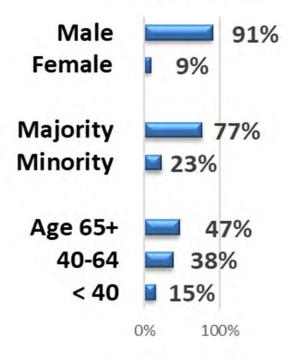


Wartime Veterans	WWII	614,532	3%
	Korea	1,472,721	8%
	Vietnam	6,499,806	36%
	Gulf (1990s)	3,786,051	21%
	Gulf (2001-)	3,524,844	19%
Peacetime Veterans		2,306,651	13%
Total Veterans 18,204,605			

Source: U.S. Census Bureau (2017)

American Community Survey 1-year estimates

#### Veteran Demographics



Source: VA.gov

Jobenomics has tailored business and job creation programs and access to funding sources for veterans.

## New Work Force Entrants Businesses & Jobs



**Generations Y & Z and other hopefuls** 



Digitally-savvy Gen Y (Millennials: 1977-1995) and Gen Z (Screenagers: 1995-2015) are leading the way into the emerging digital economy.  $_{13}$ 



## A Small Business & Job Creation Initiative



## **Initial Jobenomics Rwanda Programs**



- Jobenomics has highly-scalable businesses that can be implemented within a year, creating thousands of new Rwanda jobs and boosting the Rwandan economy.
  - African Heritage and Experiential Travel & Tourism
  - Digital Economy Jobs, Startups & Entrepreneur Clubs
  - Direct-Care/Remote-Care/On-Demand Care
  - Controlled Environment Agriculture
  - Enhanced Water Programs: Drinking, Agriculture & Remediation
  - Urban Mining, Plastics to Fuels & eWaste Metals Reclamation
  - Renewable Energy & Energy Services
- Jobenomics Rwanda list of potential programs will be expanded according to the needs of local Rwandan communities.
- Jobenomics can help obtain funding from international sources.

Jobenomics Rwanda's emphasis will be on Rwandans who want to start a business or begin sustainable careers with livable wages.

#### **Rwandan Travel & Tourism**



- According to Knoema, Rwanda's travel and tourism industry:
  - Was \$1.4 billion in 2018, up from \$0.4 billion in 2006, and \$200,000 in 1996.
  - Grew by 12% in 2018, down from 54% in 2006, and 242% in 1996.
  - Contributed 15% to GDP in 2018, up from 9% in 2006, and 1% in 1996.
- International visitors spend 6 times more than regional visitors.
- According to the latest Rwandan Travel & Tourism Report (2015), out of a total 1.2 million visitor arrivals to Rwanda:
  - 1,090,231 came from Africa with 98% arriving by land transport.
  - 129,298 came from Europe (48%), Americas (27%), rest of world (25%).
  - China was not listed a major source of visitors.
- China is the now world's biggest market in outbound tourism with nearly 150 million outbound visits made by Chinese in 2018.
   Chinese travel now prefer experience-based travel and tourism.

The global travel and tourist industry was \$2.8 trillion in 2018. Rwanda's \$1.4 billion represents about ½ of 1% of the total. African Heritage & Experiential Tourist is key to growth.

## African Heritage & Experiential Tourism



Share Rwanda Pull Advertising



Travel
Rwanda
Push Marketing

#### **Push Marketing Connects Tourists:**

#### Digitally

- Social media-driven approach
- Omni-channel content strategy
- Off-grid & satellite internet

#### Socialistically

- Heritage & Cultural insights
- Environmental interests
- Transcendental experiences

#### Logistically

- Air/ground transportation
- Accommodation/supplies
- Emergency assistance
- Concierge/guide services



Share Rwanda relies on traditional pull advertising. Travel Rwanda utilizes online push marketing of personal "bucket list" experiences.

## **Experiential Tourism**



Millennials prefer exciting junkets over sightseeing.



**Adventure travel** involves includes a "physical activity, a cultural exchange, or activities in nature." *Adventure Travel Association* 



**Eco-Tourism** entails "responsible travel to natural areas that conserves the environment and sustains the wellbeing of local people." *The International Eco-Tourism Society* 



**Cultural Tourism** entails a traveler's engagement with a region's culture, including the history, lifestyles and art of the indigenous and aboriginal people.

**Glamping** (glamorous camping) is an outdoor hospitality industry often associated with festivals, nature preserves and sports.









Experiential tourism is a viable and affordable way to boost tourist visitations to Rwanda's "must see" natural wonders and "must experience" Western, indigenous and aboriginal lifestyles.

## **Digital Economy**





- Digital economy (called the Internet Economy and the New Economy) is based on digital computing technologies
- Digital Economy is growing 5-times faster than the traditional economy.
- Potential of millions of new Rwandan jobs and businesses
- China is attempting to raise 500 million rural citizens out of poverty via the digital economy.

Traditional retail shopping is growing at 2% per versus eCommerce growth of 15% per year. Jobenomics' team of eCommerce experts help set up websites to selling on all major U.S. platforms; Amazon, Google, Facebook, eBay and Shopify.

## **Digital Economy Categories**



- Platform Economy
- Electronic Commerce
  - Mobile Commerce, M-Health, E-Sports, etc.
- Sharing Economy
- On-Demand Economy
- Apps/Bots/Artificial Intelligence Economy
- Gig Economy
- Internet of Things Economy



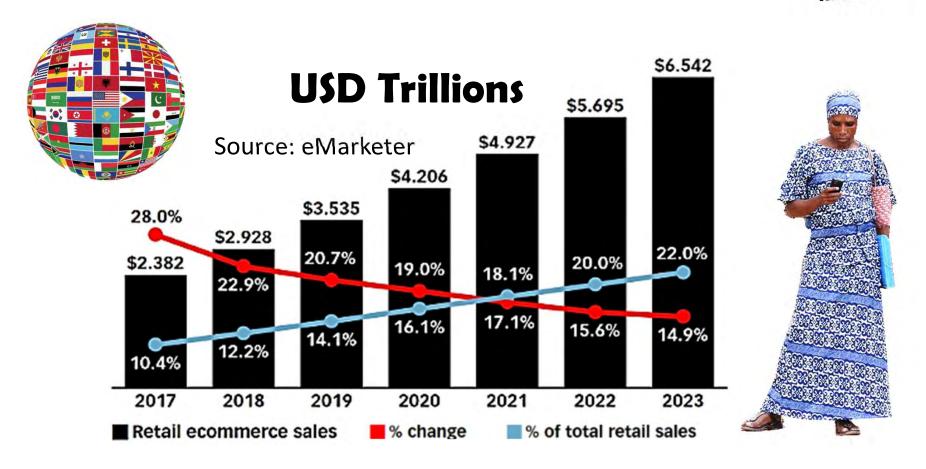




Alibaba was founded "to champion small businesses, in the belief that the Internet would level the playing field by enabling small enterprises."

#### E-Commerce Sales Worldwide





eCommerce is new in Rwanda but growing rapidly as local tech start-ups and international players enter Rwanda's market.

Of Rwanda's 12.2 million population, only 3.8 million have access to the internet, mostly via mobile phone. Source: export.gov

## Internet of Things Economy





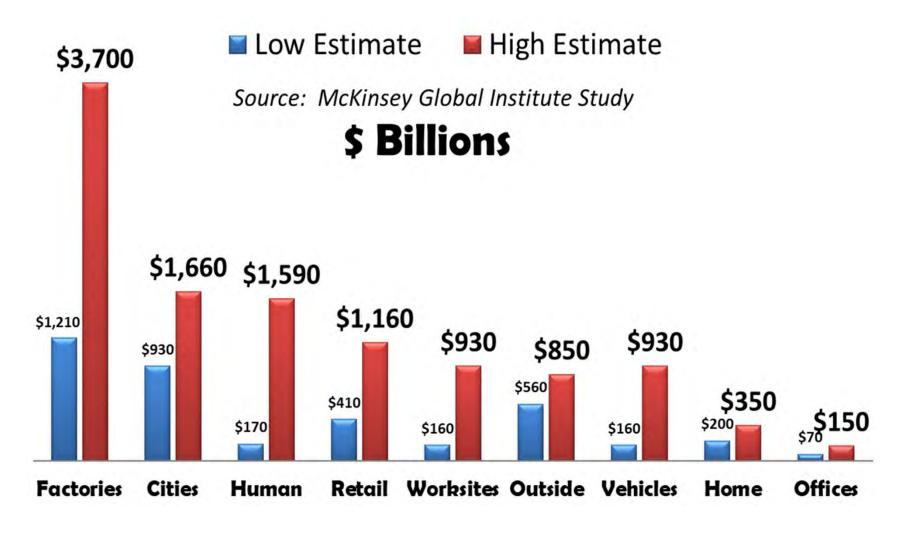
A global networked economy of connected things and people, all of which collect and share data about the way they are used and about the environment around them.

- Examples of IoT objects include security systems, selfdriving cars, electronic appliances, and integrated household and commercial ecosystems.
- Today, there are over 20 Billion connected IoT devices.
   80 billion by 2025.
- Over 60% of U.S. cities are investing in Smart City IoT.

The economic value of the IoT as high as \$11.1 trillion per year in 2025. Source: McKinsey Global Institute

# Potential Economic Impact of IoT in 2025: USD 3.9 to 11.1 Trillion Per Year



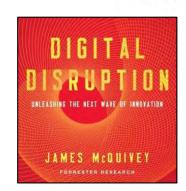


The IoT could transform every aspect of Rwandan life.

## **Digital Startups**



"Digital startups are at least 100-times easier to create and have 10-times the number of innovators that can innovate at one-tenth the cost than traditional startups." (McQuivey)



Top digital startup platforms:



Rwanda needs a digital economy strategy to raise millions of Rwandan citizens out of poverty.

## Digital Economy Entrepreneur Clubs



- Jobenomics helped start Club-E Atlanta, an entrepreneur empowerment center.
  - Public/private partnership with the City of College Park
  - Training, certification and startup business center
  - Co-working facility (hi-tech, offices, conference center, café)







Typical Club-E Startups:









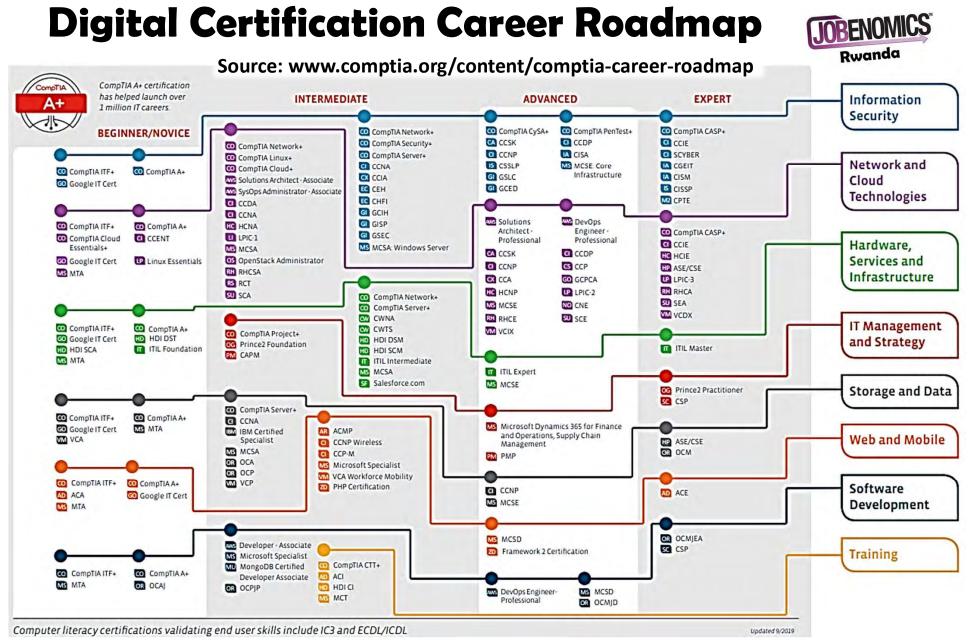








Club-E lessons learned will be incorporated in Jobenomics Rwanda.



Certified training programs are the gateway into entry-level information technology jobs without a college degree.

## **Jobenomics Direct-Care Program**



#### **Direct-Care Services**

- Healthcare
- Social assistance
- Behavioral-care
- Elder-care
- Child-care



#### **Direct-Care Center**

- Information & Call Center
- Training & Certification Center
- Management and Quality Control



Former women head-of-households are ideal for direct-care jobs.

#### **Direct-Care Telehealth Platforms**



#### **Examples of On-Demand Telehealth Programs**

- Teladoc is the largest telehealth platform with 20 million members and over 3,000 licensed healthcare professionals.
- DoctorOnDemand connects patients in minutes to board-certified doctors and therapists over live video.
- Go2Nurse is an on-demand nurse/caretaker application service.
- referralMD's standardizes referral network communication between primary care physicians and specialists.
- American Well is a complete telehealth service for healthcare companies, employers, or delivery networks.
- MDLive's telemedicine system offers a patient experience, a provider experience, and a call center.
- SnapMD is virtual care management system with a patient interface, a provider interface and an administrative back-end.

The global telehealth market is expected to reach \$40 billion, growing at a combined average growth rate of 25%.

# CLINICSTOP Micro Clinic for Diagnosis, Counseling and Remote Care John Micro Clinic for Diagnosis, John Micro Clinic for Diagnosis, John Micro Clinics Partner www.clinicstop.com







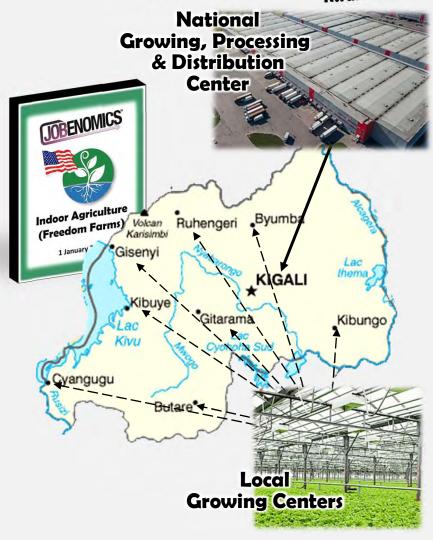


Ideal for pharmacies, churches, community centers that provide healthcare, social assistance, and behavioral care.

## **Controlled Environment Agriculture (CEA)**



- CEA is the process of growing high-value plants and crops inside a grow room or greenhouse.
- CEA allows a grower to maintain temperature, light, carbon dioxide, humidity, water, pH levels, and nutrients to produce crops in ideal growing conditions with maximum yields.
- Jobenomics' CEA program is focused on mass-producing agribusinesses, micro-farms and agricultural-related jobs.



Global CEA market is projected to grow to \$15.3 billion by 2024, up from \$6.5 billion in 2017, potentially creating thousands of businesses and several million jobs in underserved rural and urban communities,

#### **AG Core & Local CEA-Farms**



 AG Core is the National Center that manages, trains, and implements Local Centers. AG Core processes and ships locallygrown food to Rwandan, regional and international outlets.



Large Grow Center
(AG Core)
With Controlled
Environment & Vertical
Farming Systems



Jobenomics Partner, www.ACTSFFA.com

Local CEA-farms will first satisfy local needs and then ship remaining produce to AG Core.



Goal: Establish new agrarian businesses and jobs within large grow centers and numerous smaller agrarian communities in Rwanda.

## **Example of a Large Agrarian Community**



1200-Acre Freedom Farm Complex designed by ACTSFFA/Oculus





Jobenomics Partner, www.oculusarchitects.com/mies\_portfolio/acts-freedom-farm/





2.6 million sq. ft. of indoor controlled environment agriculture, greenhouse village, hotel, farmers market, winery, production and distribution facilities, commercial/community/education/worship centers, and hundreds of single-family homes and apartments.

# Example of a Live/Work Agrarian Mixed-Use Housing Complex





Affordable homes for Jobenomics Rwandans.

# Example of a Local Micro-Farm, Outlet and Farmers Market Business





Goal is to create hundreds of local outlet business to provide fresh organic food for citizens in under-served communities.

## **High \$ Value CEA Products**



#### **Common Crops**

- Culinary Herbs
- Lettuce
- Spinach
- Tomatoes
- Strawberries
- Peppers
- Cucumbers



#### **Specialty Crops**

- Medicinal Herbs
- Flowers
- Mushrooms
- Ground Covers
- Ornamental Grasses
- Bamboo
- Hemp

Herbs are highest value produce. Hemp is the fasting growing and most profitable agricultural industry.

# **Industrial Hemp Products**





The U.S. Hemp-CBD market is growing faster than marijuana and will be a \$22 billion industry by 2020 (up from \$600m in 2018).

# SuperWater HyOx Drinking Water



#### Florida Bottling Plant

Jobenomics Partner, www.superwaterhyox.com





SuperWater HyOx increases the dissolved oxygen content in water by 300%, which is essential for healthy organisms. 37

# SuperWater HyOx Agriculture Applications







**Cherry Tomatoes** 



Limes

Sugar Cane



Treated

2X

Growth





**Coffee** 









Avocado



Doubling the growth of traditional agriculture in South America.

#### **SuperWater HyOx Environmental Remediation**





HyOx Floating
Oxygenator GPS
Solar Powered
Drone



Waterways, Lakes And Ponds



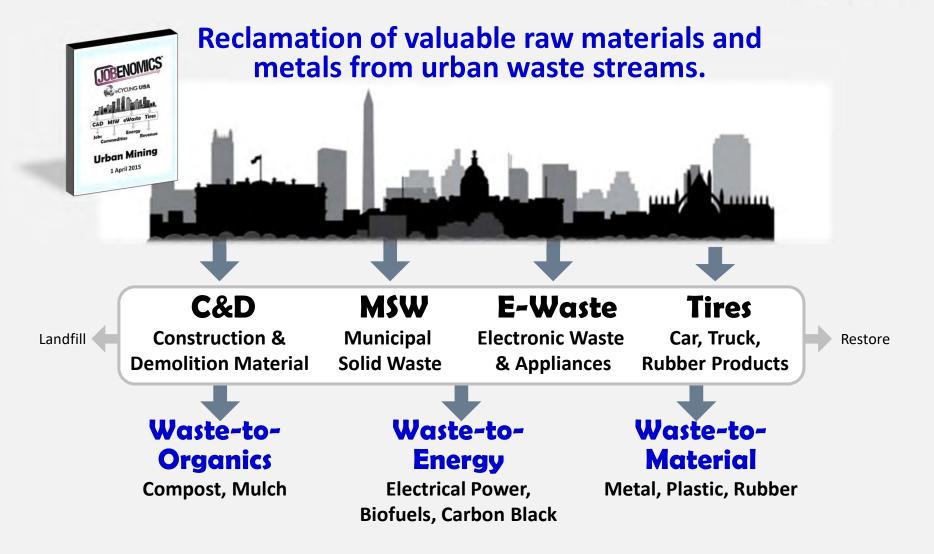
**Mining Cleanup** 



SuperWater HyOx is mitigating many forms of pollution.

# **Jobenomics Urban Mining**





Urban Mining Goal: Monetize urban waste streams to produce businesses, jobs and revenues for workforce development.

#### eWaste Materials Reclamation Facility





**100 Operational Sites Worldwide** 

Jobenomics Partner, www.urt-recycling.com

End-of-life appliances and electronics is the world's fastest growing waste steam. Our system can be operational within 12-months.

# **Modern Plastics-to-Fuel Complex**



Carbon

Black

**EVP R-One Facility** 

Jobenomics Partner, www.evptechnology.com



Growing Rwandan
Plastics Waste Problem



**Syngas** 

80%
Renewable Diesel &
Gasoline Fuels

**Imported Plastics Waste** 

China no longer accepting baled plastic waste

Suppling Rwanda with high-quality, low-sulfur fuels.

### Jobenomics Green Jobs Focus



 Jobenomics-EmeraldPlanet partnership involves bringing the world's 1,000 best green job practices to local communities.

#### **Dr. Samuel Lee Hancock**

President & Executive
Director, EmeraldPlanet
International Foundation

Creator & Host, The EmeraldPlanet TV

www.Emerald-Planet.org



#### **Chuck Vollmer**

Founder & President Jobenomics National Grassroots Movement

EmeraldPlanet Board Member & Partner

www.Jobenomics.com

- Partnership focuses on innovative, sustainable, and resilient "green" environmental, economic and community development topics, issues, practices and projects around the globe.
- EmeraldPlanet is also partnered with the U.N. Economic and Social Council and The World Bank Connect4Climate Program.

Sustainable Environmental, Economic & Social Development

# Renewable Energy Businesses & Green Jobs





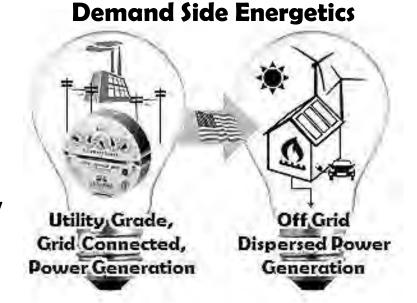
The Energy Technology Revolution will create millions of new micro-business opportunities, such as independent contractors.

## **Energy Services**

JOBENOMICS Rwanda

- Demand Side Energetics
- Net-Zero Communities/Buildings
- Services: "Energy's 3<sup>rd</sup> Rail"
  - Energy Efficiency/Conservation
  - Energy Assurance/Security
  - Disaster Preparedness/Recovery
  - Energy-as-a-Service (EaaS)
- Energy Technology Center







Jobenomics' Joe Sarubbi with President Obama and Mrs. Biden

#### Conclusion



- Jobenomics Rwandan programs can be:
  - Implemented quickly (often within one year).
  - Thousands of new businesses and jobs would be created within five years.
  - These programs (plus new programs) are highly-scalable and repeatable across the entire nation, thereby transforming the Rwanda labor force and economy.

#### Next steps:

- Rwandan decision-leaders need to decide if a Jobenomics Rwanda initiative is of interest.
- If yes, host Chuck Vollmer and Dr. Sam Hancock to come to Kigali to conduct a Jobenomics Rwanda conference with key government, business and investment decision-makers.



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www.Jobenomics.com