



**MILLENIUM**  
Regional Development Corp

# FULCRUM CORRIDOR COMPLEX

Innovation, Opportunity – Accelerated

**CONFIDENTIAL**

# Incremental Growth

Innovation, Opportunity - Accelerated

***“Urban Sprawl and Urban Decay are synonymous”***

Major development initiatives of today have resulted in congestion, sprawl, and incremental pressure on aging infrastructure. Large “magnet” development initiatives such as “live, work, play”, Medical, Retail, Industrial, and Research centers are typically tied to cities that have the infrastructure and employment base to support the growth initiative. This results in inner-city and extra-regional exodus to these work centers at least twice a day.



David Quinn  
CEO & President

# Sustainable Growth

Innovation, Opportunity - Accelerated

***“We can not change the world unless we have the courage to begin“***

MILLENIUM Regional Development Corporation (MRDC) is a Master Developer engaged in creating and delivering sustainable inter-regional growth without the sprawl and infrastructure problems of the industrial era. We deliver the next generation of entrepreneurial micro-economies through problem identification, development of a long-term regional vision in conjunction with stakeholders, identification of underserved areas, feasibility studies, and development of actionable business and human capital eco-systems. We are builders of Smart Economies.



David Quinn  
CEO & President



# Agenda



## Area of Concentration

Urban and Inner City Opportunity Zones are our initial focus



## Entrepreneur Driven Micro-Economies are Sustainable

Our Communities reverse the exodus model and create profitable businesses and plentiful jobs while establishing the business and economic base needed to support the Zero Carbon footprint infrastructure and initiatives of tomorrow.



## Preparing for Tomorrow - Today

Shovels in the Ground Today, Infrastructure for Tomorrow – a long term view of interconnected corridor projects

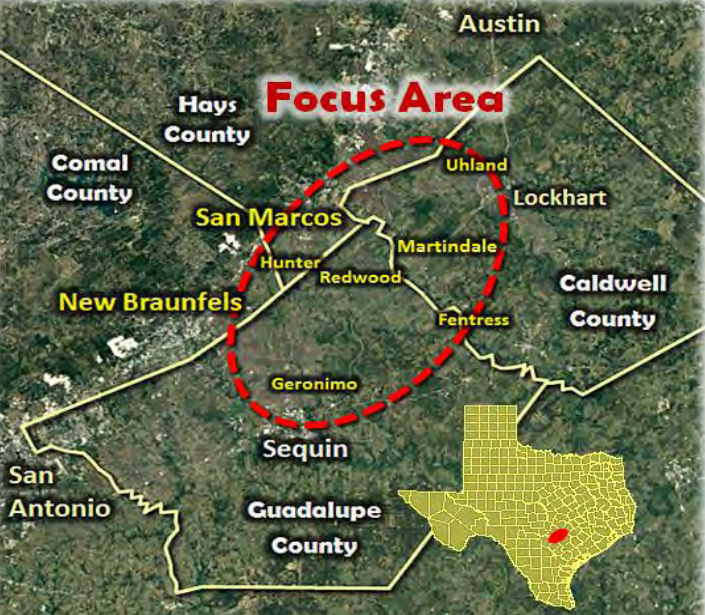


## How do we pay for it?

The eco-system of funding incremental growth

### SMRDI Opportunity Zones





# Area of Concentration

Getting Started - Today



# SMRDI

## San Marcos Regional Development Initiative (SMRDI)

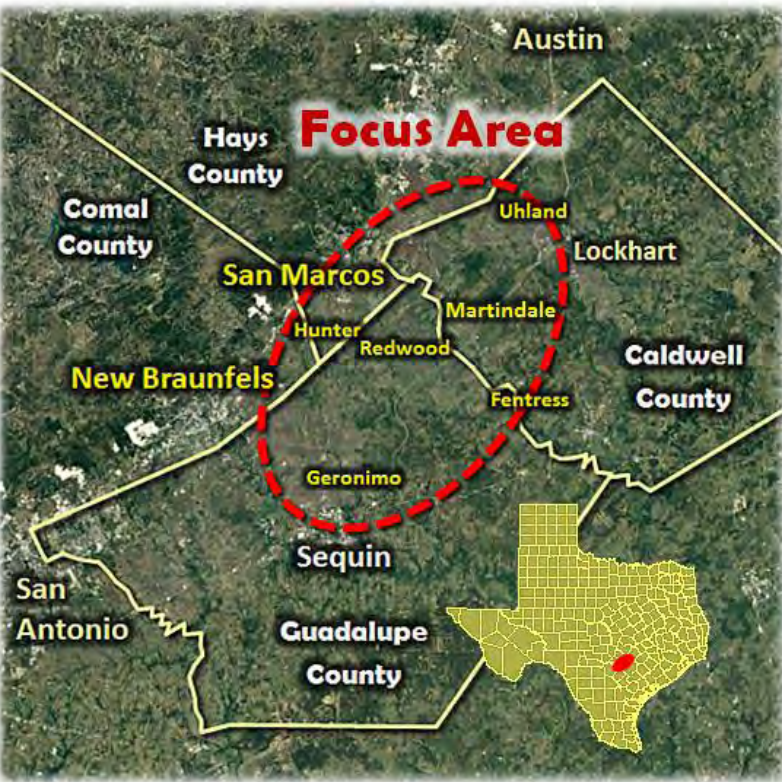
**Location:** Austin San Antonio Corridor (I-35) midpoint between the cities

**Rural:** Guadalupe & Caldwell Counties

**Opportunity Zones:** Capital gains tax deductions for investment in under-resourced communities, federal backing

**Funding:** Public Private Financing (P3)

**Readiness:** Immediate



# Assessment



In many ways, Guadalupe County has the best of both worlds at this point, as there are job opportunities for residents of all skill sets. **However, many of those opportunities exist outside the county, as almost two-thirds of the community works in a county other than Guadalupe. As the county looks to the future, a challenge is to begin to attract and locate employers that require the labor force capacity of the western side of county.** Success in this effort would also address a second challenge, as the county is losing retail and consumer activity. Some of this is due to the rise of e-commerce, but some can also be attributed to the pattern of shopping in proximity to work, rather than just near your place of residence. Meanwhile, the historic pattern of growth following growth is evident, as the reach of and connection to San Antonio extends further and further east. As this pattern continues, there could be displacement effects on the eastern side of the county, as new higher-end housing could begin to drive prices up in a way that could have a crowding-out effect for those already there. In sum, Guadalupe County in the aggregate has most of the ingredients in place for continued growth and prosperity. The overarching challenge is to manage the process (especially as it relates to infrastructure, transportation, and community amenities that serve as key attractors) to make sure that new activity is balanced and distributed throughout the county in such a way as to maximize the overall level of benefit and sustainability.

# ANALYSIS: SMRDI Demographic, Economic & Employment Snapshot

Geography	Population	Jobs (Employees)	%	Median Household Income	Median Property Value	Poverty Rate	Minority Population
USA	326M	148M	45%	\$60,336	\$217,600	13.4%	39.6%
Texas	28.3M	12.5M	44%	\$59,206	\$172,200	16.0%	58.1%
Austin-Round Rock MSA	2.12M	1.13M	53%	\$73,800	\$283,600	12.3%	48.0%
San Antonio-New Braunfels MSA	2.47M	1.13M	46%	\$56,774	\$170,100	15.2%	66.4%
San Marcos Region	Guadalupe County	150,889	47%	\$66,187	\$175,000	10.6%	48.6%
	Caldwell County	40,544	45%	\$51,346	\$124,300	17.7%	58.9%
	San Marcos	59,935	53%	\$34,748	\$34,748	34.7%	51.3%
	Redwood	4,239	53%	\$48,082	\$60,100	19.2%	89.4%
	Umland	1,233	45%	\$44,659	\$118,200	14.0%	79.3%
	Geronimo	937	65%	\$64,963	\$60,000	8.2%	48.3%
	Hays County OZone	8,363	47%	\$27,468	NA	40.0%	NA
	Caldwell County Ozone 1	8,451	8%	\$44,772	NA	16.0%	NA
	Caldwell County Ozone 2	3,978	35%	\$35,562	NA	19.0%	NA

High  Low 

Economic, Demographic Data (Source: DATA USA 2017 based on Census Bureau ACS1-Year Estimate Data)

Opportunity Zones in San Marcos Region (Source: ESRI 2017 based on Census Bureau ACS 2012-2016 Data)



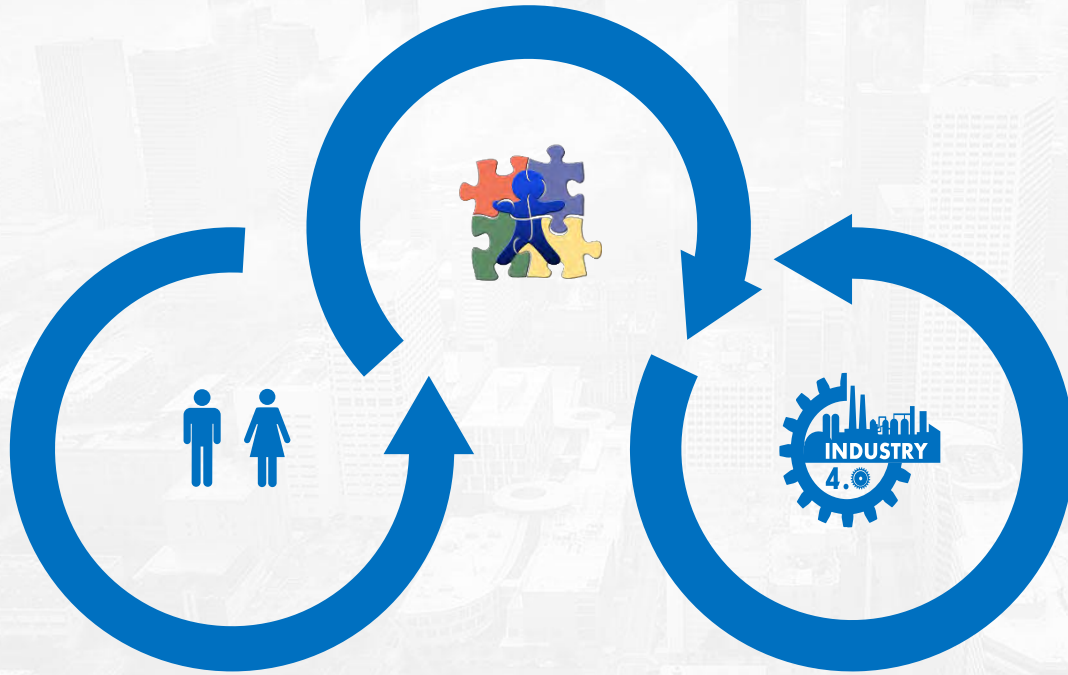
**The San Marcos Region is economically underserved and would benefit greatly from a major business and job creation program.**





# Communities of Service

We are Enablers of the Next Generation of Entrepreneur Driven Micro-Economies



## Existing Population

Our Programs provide positive impact to the local community first.



## Transitioning Citizens

Veterans, Returning Citizens, Immigrants and US Citizens are all needed for growth.



## Regional Economies

Our programs are incubators for local economies and are designed to stimulate smart growth.

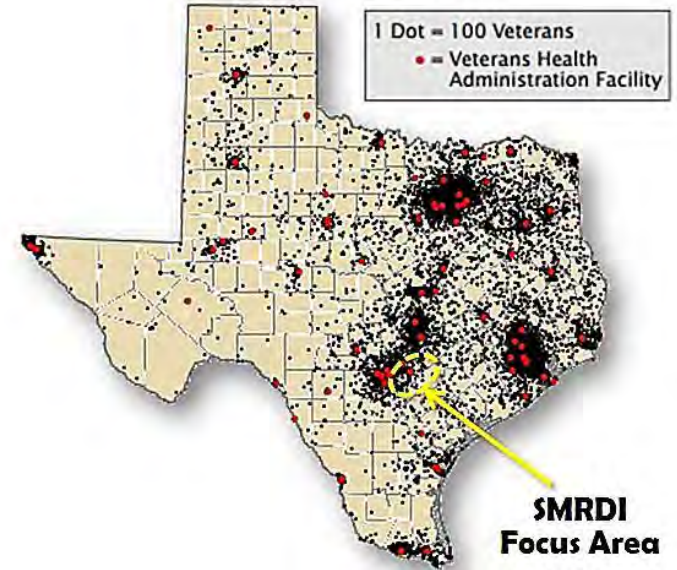
# Example: Veterans as Transitioning Citizens

## Texas Veterans

- **Population:** 1,583,272
- **Businesses:** 215,217
- **Homeless:** 2,718
- **VA Facilities:** 88
- **Age Distribution**
  - 18 to 54: 41%
  - 55 to 64: 23%
  - 65 and older: 36%

## SMRDI Focus Area Veteran Population

- **4-County San Marcos Region:** 49,338  
*(Caldwell, Comal, Hays, Guadalupe)*
- **5-County Austin-Round Rock Region:** 108,697
- **8-County San Antonio-New Braunfels Region:** 192,621



The 17-counties in and around the SMRDI focus area has 483,918 veterans—one of the highest concentrations in the United States.



27 million small businesses  
create 79% of all new jobs  
in the U.S.

## Entrepreneur Driven

Micro-Economies for Sustainable Growth & Regional Impact

Microloans supported by  
incubators and accelerators  
improve successes



27m



# Core Elements of the Plan

Envision the Future – Deliver the Present



**Financial  
& Legal**



**SMRDI /  
Jobonomics**



**Transportation  
Eco-system**



**Zero Carbon Footprint  
Infrastructure**



**EpiCenter  
@Fulcrum Park  
@Austin  
@San Antonio**



**San Antonio  
Golden Triangle  
Research Park**



**Austin  
Elite Sports  
Research Park**



**Coperniche  
Aerospace  
Center**



# Long Term Vision

The job can not begin until the first shovel goes into the ground

- Initiate Master Developer Contract
- Initiate P3 Funding Phase 1 SMRDI
- Land Contracts, Project Development
- Funding - Feasibility Studies / Team
- Infrastructure Plan and Economic Models

2019

- Initiate P3 Funding Phase 2 SMRDI
- Initiate Corridor Transportation Plan
- Initiate Communications and Energy Infrastructure

2020



2022

- Coperniche Aerospace Center
- Coperniche Aerotropolis
- Coperniche Research Park .

2021

- Initiate P3 Funding Phase 3 SMRDI
- Initiate Golden Triangle Park – San Antonio
- Initiate Elite Sports Austin



# A New Era of Prosperity Begins

Delivering jobs in economically disadvantaged areas is what we do for a living. We are generators of business and long-term regional success

- 1 **Controlled Environment Agriculture**
- 2 **Advanced Materials Processing**
- 3 Concierge Medical Services
4. Elite Sports Centers
5. EpiCenter Research Parks
6. Coperniche Aerospace Center







*Austin*  
Research Park

EpiCenter



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# Theme Based Lifestyle and Research Parks



EpiCenter

Research Park







**FULCRUM**  
INNOVATION COMPLEX

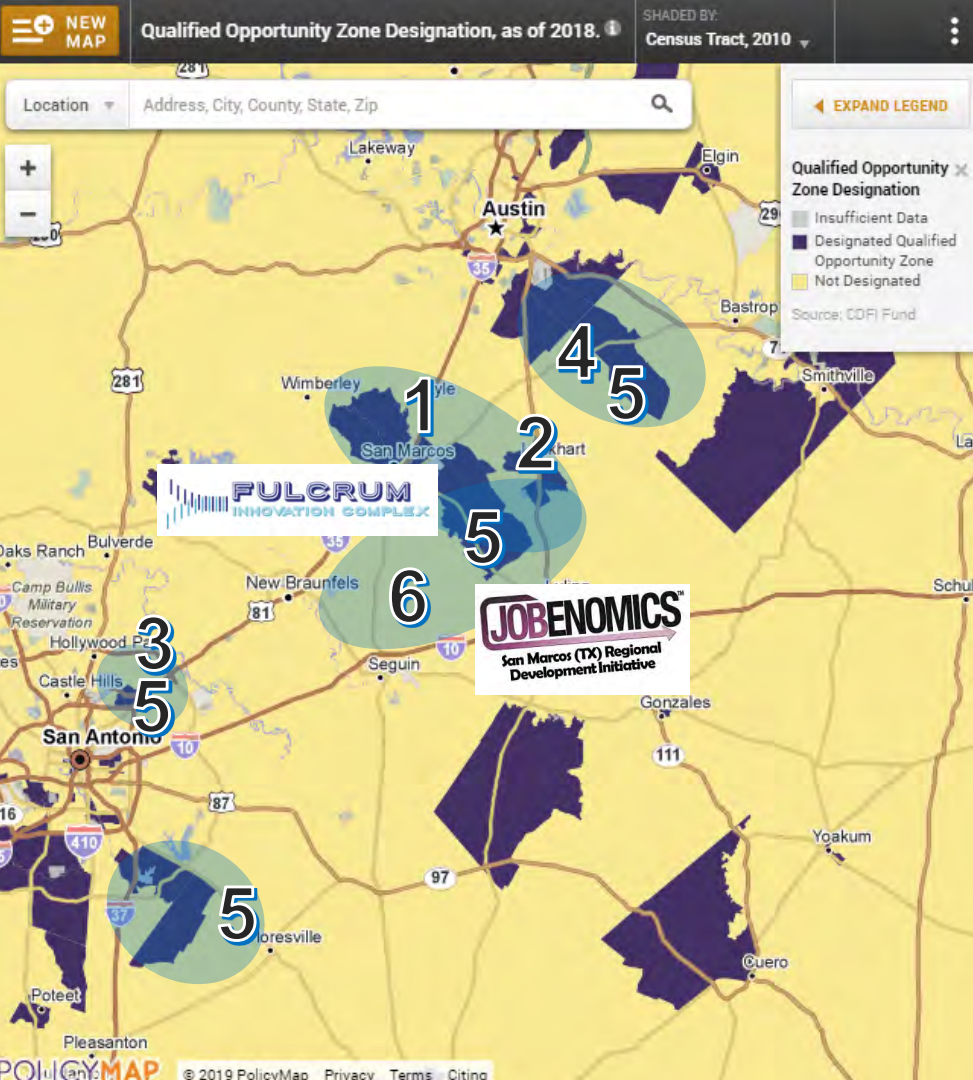






# Preparing for Tomorrow

Envision Success



## Suggested Jobenomics SMRDI

### And Related Programs

1. Controlled Environment Indoor Agriculture
2. Advanced Materials Processing
3. Concierge Medical Services
4. Elite Sports Center
5. EpiCenter Research Parks
6. Coperniche Aerospace Center

# Core Elements of the Plan

Envision the Future – Deliver the Present



**Financial  
& Legal**



**SMRDI /  
Jobenomics**



**Transportation  
Eco-system**



**Zero Carbon Footprint  
Infrastructure**



**EpiCenter  
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**Austin  
Elite Sports  
Research Park**



**Coperniche  
Aerospace  
Center**

EpiCenter





# High Level Budgets

Budgetary Estimates Only

## Controlled Environment Agriculture

Feasibility Study: \$ 800K  
Eng Planning: \$ 2.5M  
Total Land: 4K Acres / 9M SF UR  
Est Budget: \$500M – 4 PODS



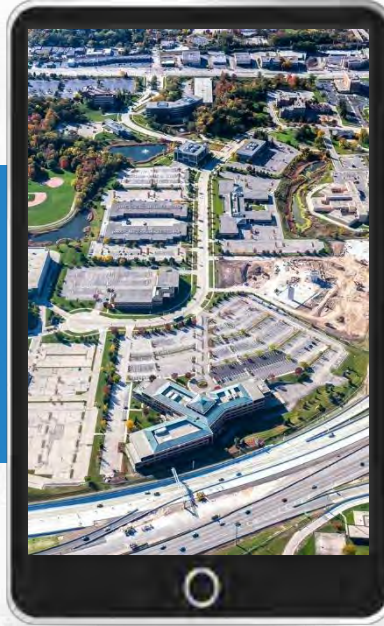
## SA GoldenTriangle & Epicenter

Feasibility Study: \$1.5M  
Eng Planning: \$5M  
Total Land: 400 Acres / 5M UR  
Est Budget: \$2B



## Fulcrum Park & EpiCenter

Feasibility Study: \$1M  
Eng Planning: \$1.5M  
Total Land: 200 Acres / 3M UR  
Est Budget: \$1B



## Advanced Materials Processing.

Feasibility Study: \$600K  
Eng Planning: \$1.5M  
Total Land: 125 Acres / 1M SF UR  
Est Budget: \$170M



## Austin Elite Sports & Epicenter

Feasibility Study: \$1M  
Eng Planning: \$1.5M  
Total Land: 225 Acres / 3M UR  
Est Budget: \$1B



## Coperniche Aerospace Center

Feasibility Study: \$15 M  
Total Land: 8,000 Acres  
Total Build: 2 Terminals  
Est. Budget: \$18 B



## Concepts and Benefits

EpiCenter

*The EpiCenter vision is driven by a sustainable business model that focuses on economic development, stability and community vitality*

### Business Model

### Vision

### Illustrative Financial Models

### Target Audience

#### Showplace



Create a world class entertainment, educational, and inspirational experience

- Tourism (Ticket Sales)
- Special Events (Conventions)
- Broadcasting Network
- Speaker Series
- Restaurant, concessions, retail

- Over 22M small business owners in the United States
- Millions of Entrepreneurs in US
- Over 60M home-based business owners
- Academic / Angel Investors and Venture Capitalists
- Business Travelers & Tourists
- Millions of Youth who operate a business or want to open one

#### Business Collaboration



Develop a community of coaching, connection support, collaboration, that leads to business success

- Endowments and Donations
- Incubation Services
- Patent Commercialization
- Referral and Support Services
- Entrepreneurship Awards Programs

- Entrepreneurs and CEOs
- Small Business Owners
- Distributors of a product lines (like Avaya)
- Young entrepreneurs and college students

#### Empowerment Services



Deliver impactful and sustainable empowerment services to urban youth

- Camps and Workshops
- Programs and Curriculum
- Web Services
- Retail Items

- Teens from all over the world
- Teachers and Educators
- Youth organizations like Boys' & Girls' Clubs

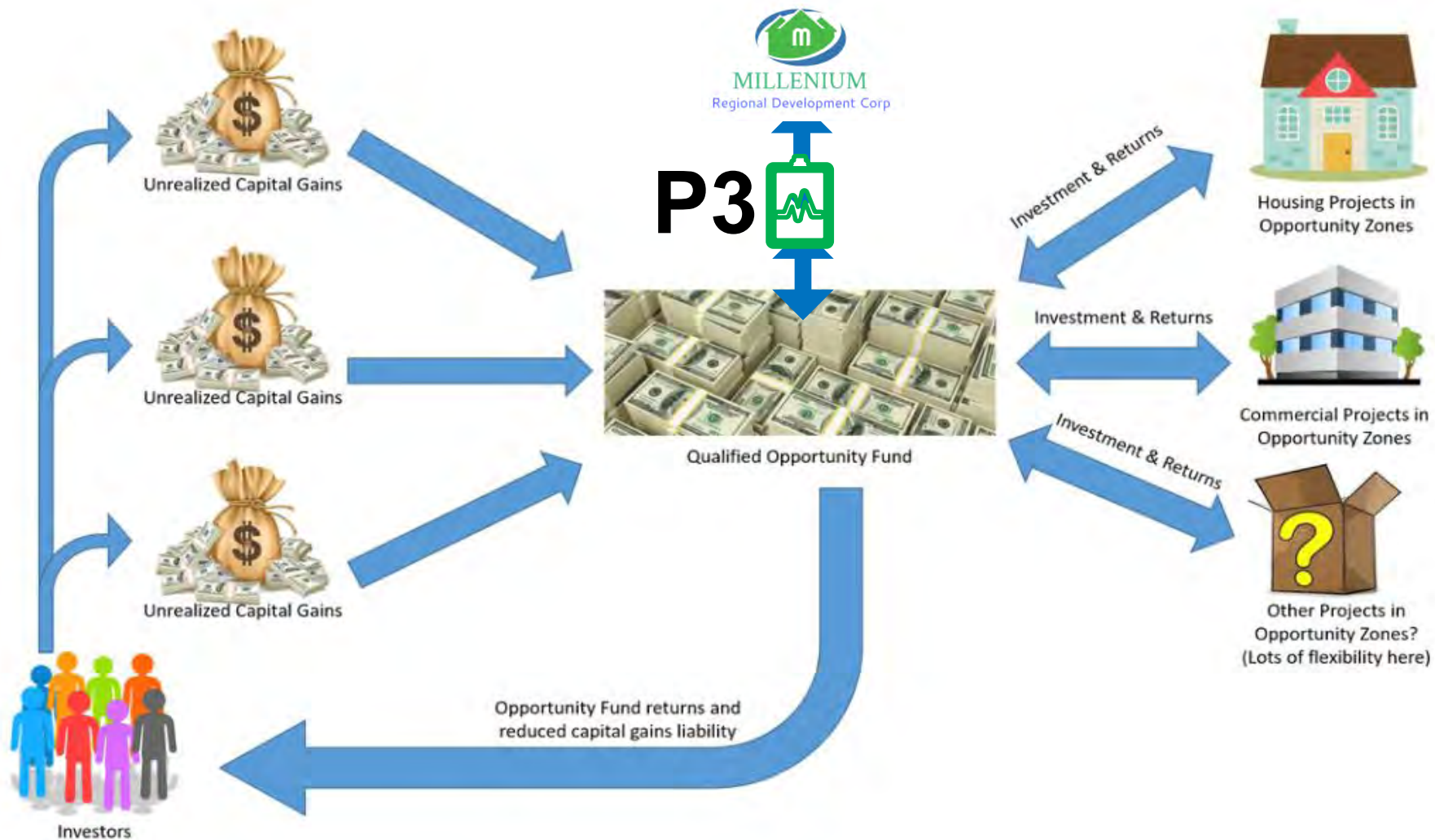


# How Do We Pay for It?

Each Business is selected for its ability to pay for itself







# Infrastructure for New Cities

## COMMUNICATIONS

A Distributed and Interconnected Fiber based Network Services Platform provides Internet Services and Controls that enhance Energy as a Service.

01

02

## DISTRIBUTED MICROGRID and ENERGY AS A SERVICE

Each project will be grid connected via a storage system that complies with FERC 841 and serves as a collection point for locally implemented renewables. Protection of the Energy Grid is critical.

03

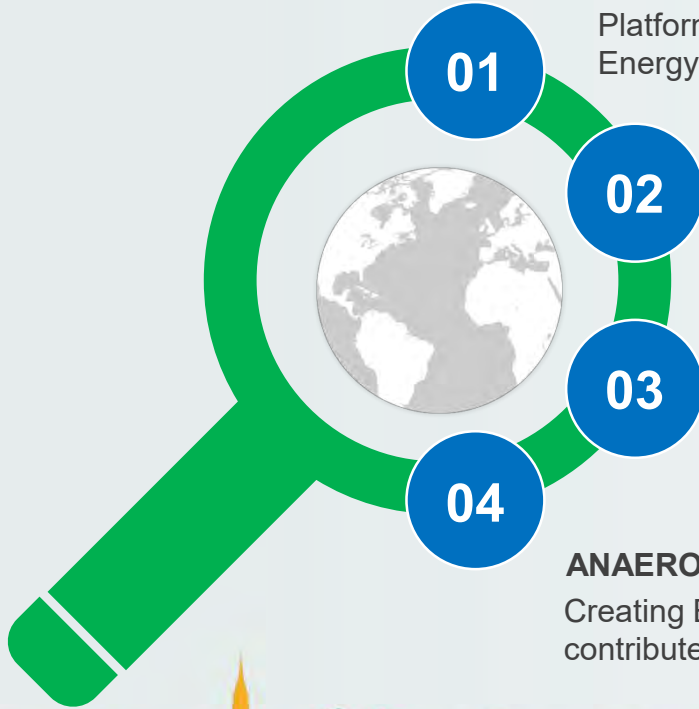
## DC MICROGRIDS IN PROPERTIES

Distribution of High Voltage DC and in-building DC Microgrids eliminates the costly thermal transfer losses and delivers levels of efficiency that are beneficial to the services provided and the environment that we live in.

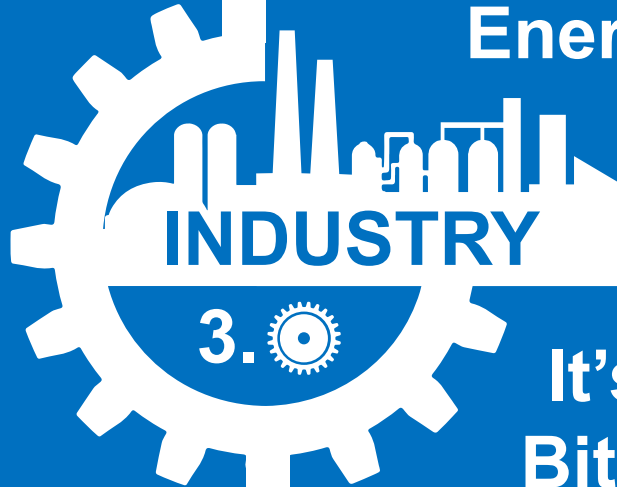
04

## ANAEROBIC DIGESTION and WASTE ECO-SYSTEMS

Creating Energy from Sewage instead of “treatment” offers grid contributed energy and outputs organic fertilizer



# Industrial Era Energy



## It's a Bitter Story

### Catastrophic Tailings

Every Industrial Era Business just like the Agricultural Era has been good for advancement of our way of life but disastrous for the environment. Chemical Fertilizers used in Farming poison our rivers, streams and water tables, Nuclear Power Generation requires enriched Nuclear Fuel and leaves behind waste that has to be stored in the worst case for 24,000 Years (Weapons Grade Plutonium), Coal Fired Plants leave behind Coal Ash Ponds and Coal Ash which leaches Vanadium and other toxic metals into the ground under which it is buried or stored, and the Grid itself loses almost 40% of the energy it creates as power is delivered to our homes and businesses and it gets worse indoors.....

#### HEAT EXHAUSTION

Pick up your Laptop Power Brick – feel the heat? That's Thermal Loss. It's the same loss that every light bulb and trillions of inefficient Industrial Era products including grid power lines and transformers produce from the AC power system that we use today. Trillions of 24 X 7 X 365 heat pumps - every second of EVERY day spewing heat into our buildings which waste more energy cooling and into our outdoor eco-system ... its no wonder Global Warming is happening



The Tried and True Model of Generation, Distribution, and Delivery has fueled our economy for years and we are the benefactors of its capability to support the socio-economic system that has fueled our daily lives. While this system has benefitted societies it has done immeasurable damage to the Environment in which we live. This model depends upon consumption thus practitioners in the industry are reluctant to discuss the power sipping realities of Distributed Direct Current (DC) in our homes and properties



## Industrial Era Energy Systems

Good for the People ... Bad for the Environment

**Generation, Distribution, and Delivery  
Systems are part of a sustainable future ....**

# Energy As A Service

Energy Systems .. Evolved



## Microgrids Serve Communities

The Energy as a Service Cloud is a next generation economic and integrated energy model that merges generators of energy with locally sourced supply (renewables) and consumers of energy. This model provides resilience and stability for the power grid while increasing business opportunities in communities that we build. Energy in effect becomes an all-property amenity made more attractive when distributing and using DC Microgrids in our developments and in our buildings. This opens profitable business opportunities to connected communities and maintains the Industrial Era jobs and industries of today.

Living is to do something bigger than yourself *every day*

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“


**WE ALL DIE.**

THE GOAL ISN'T TO LIVE FOREVER.

**THE GOAL IS TO CREATE  
SOMETHING**

THAT WILL.

”



*Chuck  
Palahniuk*

Chuck Palahniuk  
Novelist and freelance journalist  
Author of the award-winning novel, *Fight Club*



# Thank you

Innovation, Opportunity – Delivered



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