

Maurice K. Muia

(229) 395-0670 | muiam@muiamaterials.energy

EDUCATION

Saint Louis University

Master of Science in Sustainability

St. Louis, MO
Spring 2012

- Sustainable Business Administration
- Policy & Politics of Climate Resilience (Local, State, National, and International)

Florida Agricultural & Mechanical University

Bachelor of Science in Electrical Engineering

Tallahassee, FL
Spring 2008

- Electrical Power Systems, Electric Vehicle engineering

BUSINESS EXPERIENCE

Muia Materials

Founder, CEO

St. Louis, MO
Jun 2022 – Present

- Engineering ultra-conductive carbon metal cables for the electric utility market
- Developing carbon credits from electric power generated CO2 and utilization of electrochemical nanocarbons

Natural Resources Defense Council

Climate Advisor – St. Louis, American Cities Climate Challenge

St. Louis, MO
June 2019 – June 2022

- Chaired the Solar Ready Ordinance for the City of St. Louis – MT's of GHG reductions (1st in the Midwest)
- Lead the EV Ready legislation for residential and commercial construction (1st in the Midwest)
- Instituted a municipal fleet electrification for light & medium duty, saving millions from the capital budget
- Co-lead the two year 2.5+M St. Louis American Cities Climate with city leadership through the pandemic with successive legislative and executive wins that will improve the lives of all 300,000 residents for decades
- Collaborated and secured two \$1M three-year US DOE EV/EVSE funded grants for underserved communities

City Utilities of Springfield

Substation Engineer

Springfield, MO
Oct 2018 – June 2019

- Developed a 3 – 5-year capital transformer replacement capital business plan valued at 25M over five years
- Vetted and approved alliance contractors for substation design engineering, testing and construction activities
- Executed engineering designs with the T&D operation teams, at or under budget, while including more scope

Ameren Transmission

Transmission Substation Design Engineer/Innovation

St. Louis, MO
Sep 2014 – Sep 2018

- Engineered, managed and commissioned up to \$12M of transmission programs per year
- Engineered 8-10 renewable energy facility interconnection studies for developers in Missouri and Illinois MISO territory, valued at 40M
- Lead developer of Zero Carbon Credits to fund equitable sustainable energy – comm solar, energy storage
- Developed the energy sustainability mission statement for executive leadership at Ameren
- Consulted executive and senior leadership on the 2018 MO Senate Bill 564 – Grid Modernization Legislation

Abengoa

Electrical Engineer, Abener Ghenova Engineering

St. Louis, MO
Oct 2012 – Sep 2014

- Designed and engineered utility scale renewable energy power systems: Concentrated Solar Power (CSP), Waste to Energy, Photovoltaic Solar, 2nd Generation Bio-Ethanol plants; standards include (NEC, NESC, IEEE, ANSI)
- Developed the business case for energy storage coupled with traditional EHV transmission in Latin America

Virgin Islands Energy Office

Program Specialist, U.S. Virgin Islands Government/USDOE NREL

St. Thomas, USVI
Aug 2009 – June 2010

- Provided expert witness testimony on behalf of the Director of the VIEO to the VI Legislature and PSC
- Member of the EDIN – VIenergize program to reduce the Virgin Islands reliance on fossil fuels by 60% by 2025
- Administered the Virgin Islands High Fuel Efficiency Vehicle Rebate program valued at \$500k with the US DOE
- Catalogued siting of community and utility-scale renewable energy sites for the St. Thomas/St. John District

LEADERSHIP EXPERIENCE

University of Pennsylvania, Wharton School of Business

Economics of Blockchain and Digital Assets Exec. Edu.

Online

Apr 2022 – Jun 2022

- Six-week Blockchain and DeFi course developed by The Prysm Group and Wharton's School of Business
- Assessed the value of numerous invest vehicles and smart contract protocols for the battery supply chain

City of Richmond Heights, MO

Councilmember, Municipality of Richmond Heights

Richmond Heights, MO

Jun 2020 – Jun 2022

- Elected on June 2nd, 2020, voting representative in the Missouri Municipal League, term ending 2024
- First municipality in Missouri to be EV-Ready for single family and multi-family (Lead Sponsor, Mar 2021)
- Steering Committee Member for the 2022 Comprehensive Municipal Plan (36 years since prior plan)

FORTH Mobility

Board Director

Portland, OR

Mar 2021 – Present

- Guiding the vision of FORTH into a top-tier national clean and equitable transportation organization, 10+M
- Secured 2M+ dollars from the USDOE with the SiLVERS and AMP program for the City of St. Louis

National League of Cities

Energy, Envir. And Natural Resources Fed. Comm.

Remote

Dec 2021 – Jun 2022

- Developing policy recommendations for the largest municipal organization in the country

City of Maplewood, MO

Sustainability Commission, Voting Member

Maplewood, MO

2013 – 2017

- Instrumental in the City of Maplewood earning the prestigious 2016 EPA Green Power Community Award
- Developed with other Commissioners a Climate Action Plan to reduce GHG emissions 80% by 2050

St. Louis Earth Day (EarthDay365)

Board of Directors, Voting Member

St. Louis, MO

2013 – 2017

- Secured (15k) of funding from CSR philanthropic teams across the St. Louis regions for sponsorship
- Transitioned the organization to a new national identify with the 1st annual Earth Day conference in 2020

St. Francis Xavier College Church

Pastoral Council, Chair (2021-2023)

St. Louis, MO

2017 – 2023

- Lead and administered outreach programs to housing/goods and food insecure (1000's) neighbors in St. Louis
- Chair of the transition to a new leadership model in the Archdiocese of St. Louis for a distinctly Jesuit Parish

SKILLS & INTERESTS

Leadership: Local & State Policy, Customer Impact, High Growth services, Fundraising, DEI, National Partnerships

Sustainability: ESG, Corporate Strategy, Finance, New Markets, Circular Economy, Resource & Material Chain

Presentation: NPR, STLPR, STL Post-Dispatch, WSJ, Bloomberg Phil., NRDC, AAAS, USGBC, ICC, MPO, NLC

Power Markets: MISO, SPP RTO, NERC, FERC, ancillary services, 10M+ Finance Project Mgt

Engineering: DER, Energy Storage, T&D Interconnection agreements & engineering, equipment vendor relationships

Interests: Trail Running, Electric Vehicles, International Travel, Culinary Arts, Community Service