# HEATHER LANGSNER 917 434 0269 hal52@columbia.edu https://github.com/hlangsner1 https://www.linkedin.com/in/heather-langsner-2a3a481

Brooklyn, NY

### CDR and Carbon Management SKILLS

- · Corporate Carbon Management Consulting 8+ years experience Fortune 500 Corporations Lenovo, Biogen, Dubai Development and Investment Authority
- · Columbia University School of Engineering MS Chemical Engineering 2027, MIT professional development LCA certification
- Carbon removal startup Founder, CDR project due diligence and development, policy development, policy advocacy
- Integrated LCA/TEA modeling, verification ISO 50,001, GHG Protocol, OpenLCA, Energy and Carbon Inventory and MRV
  Renewable Energy Financial Modeling applicable to modeling for CDR offtake agreement modeling, RE and CDR project deployment
- US Department of Energy DOE project merit reviews for carbon capture and carbon removal including Technology Readiness Assessments, EJ Review and TEA/LCA verification

### Transferable Skills

- Tools: PFLOTRAN, Python, PostgreSQL, BigQuery, Balsamic, MatLab, Python for Data Analytics for carbon data and statistical analysis, GAMS, LINGO, CPLEX, and Vensim DSS Carbon
- Accounting: carbon budget bottom up analysis, 2050 projection methods, carbon portfolio accounting, carbon displacement analysis, carbon reporting (public and private companies)
- Advocacy: for FCDRLA H.R. 7434 and S 4280,MRV training development for non-profit, cdr policy development for states and Article 6 review
- Non-profit leadership: Vice Chair Center for Economic and Environmental Partnership (CEEP)
- Standards: Open Source ERW protocol development with PACclean and OCP
- All carbon reporting regimes TCFD, CSRD, California 258 and 261, CBAM, CSDD, GRESB, etc., 7+ in non-traditional or (ESG) investment while conducting decarbonization projects globally

### EXPERIENCE

### Basic Dust Inc November 2023-Present, Founding Partner

- · New York, NY/Seattle, Washington
- Marine and terrestrial enhanced rock weathering for carbon removal with projects in or planned for Oregon, Idaho, Washington State, Ethiopia
- · All reactive transport modeling, LCA and scientific analysis for standards bodies such as Puro Earth for accreditation
- · Monitoring, reporting and verification and business development for expansion of the process.

### DriveKey December 2023-Present, Carbon Engineer

- New York, New York, Palo Alto, California
- · Saas development of carbon accounting software ISO and GHG Protocol
- Corporate decarbonization consulting and project implementation including removal consultation

### YvesBlue September 2018-October 2023 VP Impact Analytics

New York, NY / Austin, TX

- A full Suite 20+ Portfolio Carbon Analytics modules integrating CFA and Carbon Performance Analysis including predictive analytics for climate science modeling
- · Barclays Best of Fintech Climate Model recognition
- Climate impact projection system dynamics model for full ESG Saas platform for investors
- Working Python models using Jupyter Notebooks for Carbon Metrics Report, Carbon Audit Model, Carbon Projections, EU Taxonomy and other projects

# Inventiv Capital Management June 2017 - October 2018 Co-Portfolio Manager and Renewable Energy Project Development

- Co-launched a \$100M Carbon Resiliency Technology Impact Fund. The fund has been running since 2017 with +14% absolute return over the NEX.
- Wind, solar and hydro Project Finance, Capital Markets and Deal Structuring for brownfield solar, wind repowering, carbon tech, run-of-river hydro and others • Project technical due diligence, financial model verification, site walks and checklists
- · Carbon displacement analysis and fund reporting, pitch decks and capital raising/fund marketing

### La Française - Inflection Point Capital Management September 2013 - June 2017 Portfolio Manager and Senior Analyst

- Paris, France
   Portfolio Manager Carbon Zero which reached \$150M AUM at a peak that is inspiring copycat funds in Europe.
- These funds contained renewable energy stocks for which I held portfolio manager responsibility.
   This fund avoided approximately 1500 tCO2e per €1M invested between 2015 and 2017 based on a concept and model that I designed
- Decarbonized more than Euros 45B across all asset classes.
- · Delivered prescient stock analysis on HASI, ENPH, TSLA, DVN etc for Aerospace Defense, Chemicals, Energy, Cleantech, Renewables and Technology industries

## Ongoing freelance consulting and project development

- Renewable Energy Project development and corporate decarbonization Abu Dhabi, Muscat, Jeddah, Doha April 2005 May 2006
- Presented a comprehensive plan for renewable energy integration and development targets for the Dubai Development and Investment Authority (DDIA) April 2005 Created a series of sessions to demonstrate the use of new energy efficiency data by the US Department of Energy (DOE)'s Energy Star program for Wall Street Analysts in New York 2003/2004 • Corporate consulting for various Fortune 500 companies providing Life Cycle Analysis, carbon accounting and reporting and renewable energy advisory services (Biogen, Lenovo, GE) on-going • Market development and advisory for NYSERDA Deep Energy RetrofitNY project on-going
- Ratings and analysis with write ups for carbon removal and capture projects for US Department of Energy Office of Clean Energy Demonstrations (OECD) on-going

# EDUCATION AND PROFESSIONAL CERTIFICATES

### Investment Banking Institute - February-May 2004

### **CFA Institute**

• Level I – June 2006

MS Columbia University Candidate MS Chemical Engineering 2027

MS Columbia University SEAS/SIPA Environmental Sciences and Industrial Engineering (first carbon removal project: Bark Camp Western PA Professor Klaus Lackner) Johns Hopkins University Environmental Chemistry and Quantitative Methods for Environmental Sciences

## VOLUNTEER AND PROJECT DEVELOPMENT

Center for Economic and Environmental Partnership - Vice Chair PS 84 Rooftop Greenhouse Classroom - Project lead 2012-2015 OpenAir Collective – active member Invest.Green - Technical Due Diligence and Board of Advisors Carbon Resiliency Technology Impact Fund 2017/2018 AirMiners, Foundation for Climate Restoration The Global Climate Finance Accelerator

# ${\color{blue}\textbf{LANGUAGES}}_{Python,\ SQL,\ Fortran\ for\ PFLOTRAN}$

French: Advanced Listener and Speaker/Intermediate Reading and Writing Spanish: Advanced Listener and Speaker/Intermediate Reading and Writing Hebrew: Beginner for haftarah