

Thoughts on the Future of Anaerobic Digestion

- Feedstocks
- Processing
- Offtake Markets
- Future Considerations

PETER MOULTON

NOVEMBER 4, 2021

FEEDSTOCKS

- ▶ Bioenergy challenges and opportunities
- ▶ Waste recovery within comprehensive organics management
- ▶ Effective source separation
- ▶ Predictable quality, volumes and pricing over time
- ▶ Coordinate local government programs/contracting
- ▶ Intercept organics prior to landfills

PROCESSING

- ▶ Slurry lines for WWTPs; industrial and municipal integration
- ▶ Co-locating with compost: confusion and NIMBYs
- ▶ Expanding pre-consumer feedstocks & dedicated digesters
- ▶ On-farm regulatory challenges: permit streamlining
- ▶ Ecology-Commerce least impactful siting conversation

OFFTAKE MARKETS

- ▶ Green power & RECs > LCFS RNG credits > LCFS e-credits
- ▶ Oregon vs California vs EPA: fixed feedstocks, conversion efficiency penalty, third-party aggregation
- ▶ Nutrients: organic certification, form factor

FUTURE CONSIDERATIONS

- ▶ Utility Programs: voluntary RNG, UTC conversation
- ▶ Preferential Purchasing: agency facility use doubles demand, recovered nutrients
- ▶ Incentives: sales tax exemption on credit sales, grid/pipeline interties and upgrades; six-year property tax deferral
- ▶ Rulemaking: CCA values, CFP e-credits, siting, CAFOs
- ▶ Capital Funds: USDA/USDOE vs. CCA vs. Clean Energy Fund
- ▶ R&D: WSU Applied Bioenergy Research, Ecology Waste-to-Fuels