

Philip Krain Energy Deal Sheet 2024 09 10

Company	Role	Deal/Project	Location	Technology	Size in kW	Size in \$	Years	Description	Outcome
<b>Projects in development</b>									
Power Northwest	Commercial Solar Developer	Get To-gather Farm	WA	Solar +	17.4 kW	Confidential	2024	REAP supported dual axis Stracker Solar farm located project with hybrid inverter to expand to battery back up	In permitting and pre-construction stage
Power Northwest	Commercial Solar Developer	Confidential	WA	Solar	208 kW	Confidential	2024	REAP supported dual axis Stracker Solar orchard located project	In development
Power Northwest	Commercial Solar Developer	Confidential	WA	Solar	52 kW	Confidential	2024	REAP supported dual axis Stracker Solar orchard located project	In development
Power Northwest	Commercial Solar Developer	Portland Corporation	OR	Solar	250 kW	Confidential	2024	Flat roof hybrid ballasted system using Silfab 420, SMA Sunny Tri-power 50, UniRac GridFlex racking	Meter aggregation challenges with utility stalled project
Power Northwest	Commercial Solar Developer	Multiple	OR + WA	Solar	Various	Various	2024	REAP and non-REAP supported roof, ground, agri-voltaic, dual axis tracking solar projects	In development
<b>Completed Projects</b>									
Portland Development Solutions	Solar Energy Consultant	Tacoma Commons Project	OR	Solar PV	50 kW	\$130,000	2020	Four multifamily apartment structures with innovative solar designed and ready roof. EV Chargers to be installed on site.	Safe harbor established in 2019 with installation in 2020
Neighborhood Power	Community Solar Outreach	Community Solar Various	OR	Community Solar PV	NA	NA	2020	During COVID, marketed Oregon's first community solar project subscription to entity directors of large multi-family properties	Within six weeks, presented to fifteen directors via Teams
Real Energy Solutions	Associate developer	Hawaii Solar 1	HI	Solar PV	7.7 kW DC	\$95,000	2010	Direct Commercial Solar Installation	On budget and on time
Real Energy Solutions	Associate developer	Hawaii Solar 2	HI	Solar PV	3.4 kW DC	\$50,000	2010	Direct Commercial Solar Installation	On budget and on time
Real Energy Solutions	Associate developer	Hawaii Solar 3	HI	Solar PV	10 kW DC	\$150,000	2010	Direct Commercial Solar Installation	On budget and on time
Real Energy Solutions	Project Development Lead	Hood River Solar	OR	Solar PV	16.5 kW	\$175,000	2010 Q4	Direct Commercial Solar Installation	On budget and on time with late Q4 completion possible by designing out permitting risks
Commercial Solar Ventures	Associate Developer, Financials lead	The Ecotrust: Jean Vollum Natural Capital Building	OR	Solar PV	38 kW	\$372,000	2010	Third-party financed project with PPA between investors and Bonneville Environmental Foundation	On budget and on time, with late Q4 completion.
Real Energy Solutions	Project lead	Hawaii Solar and Small Wind Site Feasibilities	HI	Solar PV + Small Wind	Various	Various	2009 - 2010	Detailed feasibility study of solar and wind resources for select sites within portfolio in order to create best development options	On budget and on time
Commercial Solar Ventures	Associate Developer, Financials lead	City of Portland Groundwater Solar	OR	Solar PV	267 kW	\$2,170,000	2009	Third-party financed project with PPA between investors and Bonneville Environmental Foundation.	On budget and on time
Commercial Solar Ventures	Associate Developer, Financials lead	City of Portland East Portland Community Center	OR	Solar PV + Solar Thermal	87 kW PV + 6 Collector Solar thermal installation	\$725,000	2007 - 2008	Third-party financed project with PPA between investors and Bonneville Environmental Foundation.	On budget and on time
Commercial Solar Ventures	Associate Developer, Financials and Investor Co-lead	Portland Habilitation Center	OR	Solar PV	858 kW	\$7,500,000	2005 - 2007	First third-party financed and largest roof installed solar project in pacific northwest.	On budget and on time
<b>Development Totals</b>					<b>1,288</b>	<b>\$7,500,000</b>			
<b>Projects developed, but not completed</b>									
Power Northwest	Commercial Solar Developer	Oregon Winery	OR	Solar	~750 kW	\$2M	2024	REAP supported mix of standing seam, flat roof and dual axis tracking solar installations for total of ~1 mWhr of production annually	After five months of development, customer's assumption of REAP eligibility was incorrect. Without REAP, the project no longer made financial sense.
Auric Energy	Solar + Storage Energy Consultant	Oregon Residential Projects	OR	Solar PV	35 kW	\$90,000	2020	Individual residences	Auric Energy went bankrupt overnight. Projects were not completed.
Rappaport Energy Consulting LLC	Director of Development	Geothermal concentrated Solar Thermal Hybrid Power Plant	CA	Low Temperature Geothermal + Parabolic Solar Troughs + Organic Rankin Cycle Turbine	6 MW	6M	2013 - 2014	Innovative heat based power plant providing baseload capabilities through enhancement of previously overlooked geothermal resources with parabolic solar trough technologies	Site access with utility was restrictive and DOE SBIR grant funds exhausted
RealCom Associates	Program Manager and Project Lead	Mountain top off-grid hybrid power station proposal	WA	Solar PV + Small Wind + ASGM Batteries + Propane Generator	26 kW PV, 8,000 amp/hr battery stack, 3 kW Whisper turbine, 5.5 DC propane generator	\$256,000	2011	Mountain top off-grid power station for cell site inaccessible seven months of the year integrating solar PV, wind, batteries and generators.	Company not prepared to spend up to \$300,000 on mountain top power station
Commercial Solar Ventures	Associate Developer	~10 Third Party Financed Projects	OR	Solar PV	5 kW - 40 kW	Various	2010 - 2011	Third-party financed solar development with non-profits, government buildings, schools, etc...	State tax credits eliminated and tax equity investors left marketplace, resulting in company dissolution
Real Energy Solutions	Lead Developer	Brewery Solar	OR	Solar PV	86 kW	\$860,000	2009	Direct Commercial Solar Installation	Pricing too high
RealCom Associates	Project lead	Megler Small Wind	WA	Small Wind	10 kW	\$80,000	2009	Direct commercial development with wireless company	Project halted due to marbled murrelette sea bird migratory flight path
Real Energy Solutions	Co-lead on wind feasibility study	Brewery Small Wind Project	OR	Small Wind	15 kW turbine	\$80,000	2009	Direct Commercial Solar Installation	Permitting, cost and complexity
Real Energy Solutions	Project lead	Oregon Solar and Small Wind Site Feasibilities	OR + WA	Solar PV + Small Wind	2 kW - 20 kW	Various	2007 - 2008	Detailed evaluation of solar and wind resources for select sites within portfolio in order to create best development options	On budget and on time
Real Energy Solutions	Project lead	Cell Site Solar and Wind Site Assessments	OR + WA	Solar PV + Small Wind	2 kW - 20 kW	Various	2007	High level evaluation of solar and wind resources for portfolio of sites in order to assess best options for feasibility studies	On budget and on time
Commercial Solar Ventures	Program Manager, Lead originator, financial modeling specialist	~25 Faith based buildings	OR	Solar PV	10 kW - 40 kW	Various	2006 - 2008	Pursued community investment platform along with third party financing	State and federal financing regulation restrictions
Agroplast	Associate Developer, Financials, Business Plan and Investor Co-lead	Agroplast	Denmark	Biogas	NA	NA	2004	Supported founder of biogas technology startup with technical business plan, financial model and investor materials	Pitched business plan and pilot plant to international investors with ask of \$750,000

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<b>Global Homestead energy related consulting</b>									
Oregon Clean Power Cooperative	Solar Developer	Talisman Condominiums	OR	Solar + Storage + EV	90 kW	TBD	2023	Collaborated on financial model, supported analysis of electricity bills and was designated project contact. Project may be first in Oregon using Allume SolShare hardware along with Co-op financing.	Co-op in discussion with HOA to assess community ownership structure, EV infrastructure, storage requirements, etc...prior to obtaining installation bids.
Oregon Clean Power Cooperative	Solar Developer	SnowCap	OR	Solar	71 kW	TBD	2023	Collaborated on financial model, supported analysis of electricity bills and designated project contact for organization and bidding installers.	Co-op in discussion with organization to assess ownership challenges related to building and system.
Oregon Clean Power Cooperative	Solar Developer	Oakridge (WAC Solar)	OR	Solar + Storage + Heat Pumps	25+ kW	TBD	2023	Grant funded community facility restoration and resiliency project. Onsite assessment with general manager, architect and city administrator.	Co-op in discussion with Lane County to evaluate appeal of 25 kW size restriction for community resiliency.
Oregon Clean Power Cooperative	Solar Developer	Georgia Court	OR	Solar + Storage	41 kW	TBD	2023	Introduced HOA solar champion to Co-op as second potential Allume SolShare project within Oregon. Ownership structure to be assessed.	Co-op in discussion with solar champion to determine next steps.
InPipe Energy	Development Associate	Series A Fundraising	OR	Microhydro	NA	5M	2020	Worked with CEO to develop and engage investor lists for Series A	Facilitated numerous introductions and opportunities
In3 Financial Group	Development Associate	Various International	OR	Solar PV, Microhydro, Regenerative Ag	Various	Various	2020	Evaluated and developed financial models, business plans and pitch decks for sustainable business ventures requiring financing of 25M	Performed analysis of three startups, assisted development of summaries, plans and pitch decks
Variety Energy	Development Associate	Various International	Intl	Solar PV	Various	Various	2020	Supported Variety Energy founder, reviewing international utility scale solar projects in Spain, Italy and Mexico	Project development is in process
Global Energy Consulting LLC	Financial Modeling Specialist	Natural Gas Production	AK	Gas processing facility	160,000 MCF Daily	1.7 Billion	2014 - 2016	Consulting in Portland on small team in support of Japanese investors evaluating purchase of large natural gas facility	I left team in order to start the Garage. I do not believe investors acted on opportunity
AT&T	Consultant	Repower cell site feasibility	WA	Offgrid solar power station	400 kW (225 kW)	1,000,000 (\$750,000)	2012	Big picture design, cost and assessment of mountain top solar power station	Not feasible due to high power needs, limited land, snow impacts and significant costs
AT&T	Consultant	Passive solar cell site design to reduce over heating	NV	Reflective paint, breathable gates, insulation options	NA	NA	2012	Discussion and assessment of passive solar solution to reduce equipment overheating	Submitted recommendations and 3D renderings for their implementation