

**Canadice Lake Technologies, Inc.<sup>1</sup>**  
**Narrative and Supporting Financials<sup>2</sup>**

Canadice Lake Technologies (CLT) is a privately held firm specializing in renewable energy production and storage technologies in the commercial and industrial space. The market for renewables and energy storage is expected to remain robust with outsized growth rates for decades as the nation's aging energy infrastructure is updated and brought into line with currently available technologies. Given the rate of technological change in the industry it's within reason to see an entire restructuring of the space as currently cutting-edge technology is outpaced by innovations yet unthought-of. The leading firms in this space over the next 10 years are expected to gain a strategic advantage over newcomers as they amass and deploy capital.

Though CLT has been relatively thinly capitalized, the firm has enjoyed dynamic growth over the last decade and is providing significant cash flows to its stakeholders. CLT sells, installs and services a proprietary line of solar panels, collectors and components manufactured in Asia, most often paired with a domestically manufactured, commercial-scale energy storage unit. Additionally, the firm employs a team of engineers to assist clients in the design of highly efficient renewable energy systems and not only sells those products it produces, but also has an in-house leasing operation to make purchasing system components less costly. The firm's top-line revenue includes sales of its products, consulting income from design and engineering activity, equipment leasing, service and repairs.

Founded in 2009 by three former Westminster College roommates with degrees in marketing, finance, and management from the Gore School of Business, the firm's early capitalization included equity contributions of \$500,000 from each founder<sup>3</sup> and a \$1,000,000 at 11% SBA loan (interest-only). At the beginning of 2010 the firm agreed to an Angel investment of \$2,000,000 comprised of a \$1,000,000 long-term debt at 9% (interest-only) and \$1,000,000<sup>4</sup> equity stake.

The combination of creative management, a well-resourced stakeholder group, expanding cash flows, moderate debt, and inexpensive borrowing have made CLT an attractive candidate to become a platform for the development of an industry leader. The resultant activity may result in yet greater interest from already-hungry and inquisitive private equity firms awash with investor cash, so much so that the firm's board has repeatedly received inquiries with respect to possible transactions. Initially the firm's founders envisioned CLT as a as a lifestyle firm, but subsequently took on \$4,000,000<sup>5</sup> in Venture Capital equity funding in 2016 to realize growth opportunities<sup>6</sup> rather than take on costly debt concerned the resulting debt service obligations may place excessive pressures on the firm's future cash flows. Now, these early investors are seeking liquidity and the founders fear they may be in a position

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<sup>1</sup> This problem and solution set is intended to present an abbreviated discussion of the included finance concepts and is not intended to be a full or complete representation of them or the underlying foundations from which they are built.

<sup>2</sup> This problem set was developed by Richard Haskell, PhD (rhaskell@westminstercollege.edu), Gore School of Business, Westminster College, Salt Lake City, Utah (2021) and Michael von Ballmoos (michael.vonballmoos@gmail.com)

<sup>3</sup> Founders' shares held as common equity

<sup>4</sup> Equity funding at \$1,000,000 in 15% 1:1 convertible preferred shares based on a pre-money valuation of \$3,034,753

<sup>5</sup> Equity funding of \$4,000,000 in 10% 1:1 convertible preferred shares based on a pre-money valuation of \$10,000,000

<sup>6</sup> Preferred shareholders currently own 27% of the firm's equity shares based on a \$12,000,000 post-money valuation (2016).

to lose control of the firm they had expected to keep in “family” hands for generations. As it is, the outside investors already control 3 of the firm’s 7 board seats.

Each of the three founders currently receive annual salaries of \$200,000, enjoy approximately \$22,000 per year in what might otherwise be considered personal expenses paid for by the firm, and take distributions as agreed upon by the equity stakeholders.

Equity stakeholders have agreed on annual valuation estimates based on an EBITDA multiple of 6.0x. See 2020 & 2021 (projected) Income Statement, Balance Sheet and Cash Flow Statement – **Appendix A**.

### **Growth Opportunity**

Recent decreases in the cost of renewable energy production and storage technologies have allowed the firm to enjoy robust profits in recent years, but increasing competition is beginning to have adverse effects on firm cash flows. The firm continues to invest in innovative solutions and is optimistic of growth prospects resulting from the current infrastructure bill making its way through the US House and Senate and the favorable tax credits planned to motivate increased integration of renewable energy solutions for commercial and residential use. Management expects revenue to increase by 12% in 2022-2025 through organic growth and is looking for gross and operating margins net of Research and Development costs of 66% and 11% respectively<sup>7,8</sup>.

Additionally, the firm sees opportunities to grow through the acquisition of two smaller competitors in 2022 and 2023 in markets currently not covered by the firm<sup>9</sup> contributing 30% to top-line revenue in 2023 and leading to 15% revenue increases in 2024 and 2025 each. The increased scale of the expanded firm is expected to disproportionately increase EBITDA as a result of expected decreases in COGS and Operating Expenses of 1% and 4% respectively.

Hopeful to avoid potential control issues arising from extending equity capital to new or current external investors, the firm’s founders have agreed to pursue debt financing to help capitalize acquisitions given currently attractive borrowing costs.

Over the last ten years the firm has attracted a talented mid-level management team they’re anxious to maintain and motivate on a long-term basis through an incentive stock award and option program that may also be available to the founders and potential equity stakeholders picked up through acquisitions. They’ve tentatively agreed to a plan through which 20% of the firm’s annual Net Income will be used to fund equity awards to all employees with at least three years of service to the firm; distributed proportionately based on salaries and wages. Added to the stock awards will be stock options amounting to three times the stock awards at a strike price of 150% of share values at the time of the awards. Stock awards and options will have a ten-year vesting schedule with an out clause triggered through a possible liquidity event.

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<sup>7</sup> COGS of 24% Panels & Components and 10% Storage Tech for 2022, declining to 23.5% and 9.5% respectively starting in 2023

<sup>8</sup> OpEx for 2022 equal to 2020 actuals as percentage of revenues; absolute (nominal) declines expected in Production & Service (2%), Equipment Leases (1%) and General & Administrative (1%) starting in 2023

<sup>9</sup> Expected acquisition value of \$10,000,000 based on 0.8 revenue multiple

## Senior Management

Jessica Rene (founder), President & CEO – BS Finance (2001) and MBA Gore School of Business, Westminster College (2003); JD, University of San Diego (2006); Dunlop, Bradford LP (2006-2009)

Becca Ashby (founder), VP Operations – BS Management, Westminster College (2001); MBA Marriott School of Management, BYU (2005); The Sutherland Group (2005-2006); Tesla Motors (2006-2009)

Lauren Zahm (founder), VP Sales & Marketing – BS Marketing, Westminster College (2001), JD Washington & Lee (2004), Disclosure Law (2004-2007); Adobe Systems (2007-2009)

Earl Richards, CFO – BS Finance, BYU (1995); MS Economics (2015), University of Utah; Novell Systems (1995-2001), Almaden Technologies (2001-2005); Tesla Motors (2005-2014). Richards is a board appointee representing external equity stakeholders.

Ehsan Bastai, CTO – BS Chemical Engineering, MIT (2001), PhD Materials Science & Engineering, Stanford University (2007); Siemens Gamesa (2006-2010); Solar City/Tesla (2010 – 2014); NextEra (2014-2017)

Sheri Johnson, VP Sales & Marketing; BS Marketing, University of Santa Clara (1998); Adobe Systems (1998-2011); Boston Design (2012-2015)

John Craig, CLT Board Chair, - BS Construction Mgt, Sacramento State College (1987), MS Applied Materials Engineering (1998), UC Davis; SMF Construction (1987-1992); Earl Construction (1992-2004); Raging Wire Tech (2005-2010)

## Management Compensation

CLT's employee compensation package includes the usual employer sponsored taxes<sup>10</sup>. The firm offers an employee benefits package featuring 1) generous 401k dollar-for-dollar matching contribution of 3% under a Safe Harbor plan<sup>11</sup>, 2) paid vacation<sup>12</sup>, 3) FMLA coverage<sup>13</sup>, 4) 75% of the cost of employee healthcare coverage<sup>14</sup>. The firm's senior management have access to the founders' flat in Paris (when available), an unrestricted expense account of \$1,000 per month, and stock and stock option awards as declared by the board of directors. The founders each enjoy the additional benefit of \$15,000 per year in qualified personal expenses paid through their company credit cards.

## Real Estate Owned (REO)

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<sup>10</sup> Employer sponsored tax rates for 2021 include Social Security (6.2%, Medicare (1.45%), Federal Unemployment (6% of the first \$7,000 on annual income), Utah Unemployment (varies by employer experience – CLT's rate is .04%), and Utah Workman's Compensation (\$0.78 per \$100 in covered payroll)

<sup>11</sup> Safe Harbor retirement plan provisions require all matching contributions be immediately and fully vested (100%) for all employees

<sup>12</sup> The firm provides two weeks paid vacation<sup>12</sup> for employees of at least one year with an additional one week for every five years of service up to a maximum of six weeks per year

<sup>13</sup> The firm's FMLA (Family Medical Leave Act) includes 12 weeks of leave for qualified family medical events. Employees with three or more years of service receive fully paid leave at their base salary levels

<sup>14</sup> Average cost of employer sponsored health insurance: <https://www.ehealthinsurance.com/resources/small-business/average-cost-of-employer-sponsored-health-insurance>

West Jordan, Utah – 15,000 ft<sup>2</sup> warehouse/5,000 ft<sup>2</sup> office combination; purchased in 2015 for \$4,135,000; estimated current market value equal to \$6,200,000; current SBA loan holds property as collateral; subject to 39-year straight-line depreciation for commercial property.

### **Patents Held**

The firm holds patents on power conversion/transfer technology from solar collectors to battery units based on effective R&D capitalization of \$1,036,500 in 2019 amortized over six years. Current market value of patents estimated at \$4,500,000 (10x potential royalties). The firm licenses use of patents to firms outside of its current service area in exchange for royalties of 10% of generated revenue. Current acquisition targets are amongst those to which the firm collects royalties.

Firm's 2020 and 2021 R&D expenditures of \$1,718,000 expected to result in new patents to be capitalized in 2022 and amortized over 6 years with annual royalty potential of \$500,000.

### **Investments**

In addition to the acquisitions indicated in the firm's growth opportunity, the firm expects to continue to invest in Technology and Equipment at the rate of organic growth. While the firm will continue to invest in Research & Development, it does not expect to capitalize these investments, seek additional patents or offer out the use of newly developed innovations for the use of other firms.

### **Some History**

When the three Westminster alumni started Canadice Lake Technologies they had great plans for their collective futures and confidently set about developing the structure of the firm, designing the renewable energy processes and technology they expected to provide, and rolled out a sales and marketing plan for the first year's operations. They hired two experienced engineers, Anna Kendall and Sean Riccardelli, and brought on a VP of Sales & Marketing, Rick Taylor. Each of the additions to the company's development team agreed to work for sub-market wages in the hopes their efforts would result in a valuable firm with industry leadership potential. They're ambitious plans called for first year revenue of \$1,000,000 with \$175,000 in EBIT ... *the audacity of hope*.

As is often the case, proof of concept, product development and process integration required greater expense and longer lead times than been hoped. By the end of the 3<sup>rd</sup> quarter and with no revenue on the horizon it was clear the \$1,500,000 million contributed in founder's equity plus an SBA loan of \$1,000,000 would likely be insufficient to sustain operations through to positive cash flows and healthy Net Income. The firm had consumed \$876,000 in cash, projected an operating loss of \$526,000 for 2009 and expected further losses of \$1,180,000 on 2010 expected revenue of \$6,250,000. It was time to seek additional outside financing. See 2009 and 2010 (projected) Income Statement, Balance Sheet and Cash Flow Statement – **Appendix B**.

While 2009 operating loss and 2010 projected losses were disappointing to stakeholders, the firm's management gained valuable understanding of some of the challenges of developing, introducing and applying new technologies. During this process the firm's engineers developed energy transfer technology improving transfer rates (speed and efficiency) from collected electricity (DC) to useful electricity (AC). The firm applied for received design patents useful in the application and installation of commercial scale renewable energy collection and storage systems with the expectation these would

provide 1) a competitive advantage over similar firms operating in the space, 2) a licensable product to firms in markets beyond the firm's current reach. Further, the firm's sales and systems design personnel developed critical relationships with commercial architectural and engineering firms projected to generate future product, consulting, leasing, service and repair revenues. The firm entered 2009 with an interesting idea and exited the year with a credible business plan and both the technology and human capital to see it to fruition. **Appendix C** provides Management Salary detail for 2009 (salaries paid and market wages).

## **Investors**

John Craig, a well-resourced angel investor as the result of a successful exit from Raging Wire and expertise in energy transfer and storage technologies agreed to provide equity and debt financing of \$2,000,000 as of the end of 2009 in exchange for an appropriate equity stake in the firm represented by 15% participating preferred shares and an appointment as the Chair of the firm's Board of Directors.

Hakfam Ventures, LLC received a \$4,000,000 equity stake in CLT at the end of 2016. The firm agreed to a \$10,000,000 valuation at a 5x EBIT multiple and two seats on the firm's Board of Directors. Hakfam is a venture capital firm with expertise in the energy storage space and investments in Almaden Technologies (commercial drone, battery, and imaging design) and Leland Manufacturing (commercial contract manufacturing). HakFam has also agreed to fund the \$10 million acquisition in exchange for a 6% interest only loan and an additional 500,000 preferred shares<sup>15</sup>.

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<sup>15</sup> Additional preferred shares granted to HakFam in exchange for the VC extending a below market loan of \$10 million and without being required to provide additional paid-in capital.

Appendix A - Canadice Lake Technologies, Inc. 2020 (actual) & 2021 (projected) Financial Statements<sup>16</sup>

Canadice Lake Technologies					
Balance Sheet (millions)					
Year Ending December 31					
	2020 actual	2021 projected		2020 actual	2021 projected
Current Assets			Current Liabilities		
Cash & Securities	0.778	1.111	Accounts Payable	1.936	2.255
Accounts Receivable	1.747	2.072	Wages Payable	0.064	0.056
Inventory	1.770	2.144	Accrued Liabilities	0.144	0.076
Total	4.295	5.327	Total	2.144	2.387
Fixed Assets			Long Term Debt		
Real Estate	3.605	3.415	Angel Debt	1.000	1.000
Technology	2.107	2.920	SBA Loans	1.000	1.000
Equipment	4.094	4.945	Total	2.000	2.000
Patents Held	0.864	0.691			
Total	10.670	11.971	Owner's Equity		
			Common Stock	1.500	1.500
			Preferred Stock	5.000	5.000
			Accumulated Retained Earnings	4.321	6.411
			Total	10.821	12.911
Total Assets	14.965	17.298	Total Liabilities and Owner's Equity	14.965	17.298
Additional Financial Information				Cash Flow Statement	
Common Equity	2020 actual	2021 projected	Cash Provided (used) by Operations	2021 projected	
Shares Outstanding (millions)	15.000	15.000	Net Income	2.640	
12/31 Price per Share	1.511	1.643	Plus Depreciation & Amortization	1.151	
Value (millions)	22.666	24.639	Change in Working Capital		
Preferred Equity (2:1 preferred to common)			Decrease (increase) in Receivables	-0.325	
Shares Outstanding (millions)	5.000	5.000	Decrease (increase) in Inventories	-0.374	
12/31 Price per Share	0.756	0.821	Increase (decrease) in Accts. Payable	0.311	
Value (millions)	3.778	4.106	Increase (decrease) in Other Current Liabilities	-0.068	
Valuation			Cash Provided (used) by Operations	3.335	
EBITDA Multiple	6.00	6.00	Cash Provided (used) by Investments		
Estimated Value	27.666	29.634	Additions to Net Fixed Assets	-1.301	
Equity (Common & Pref)	26.444	28.745	Depreciation	-1.151	
Pref to Common Conversion Ratio	2.00	2.00	Cash Provided (used) by Investments	-2.452	
Debt Information	Rate	Term (years)	Issued	Cash Provided (used) by Financing Activities	
Angel Debt	9.00%	20	2010	Additions (reductions) to Debt	0.000
SBA Loans	11.00%	30	2009	Net Issues (repurchases) of Stock	0.000
Current Yield	7.00%			Dividends (Paid)	-0.550
				Cash Provided (used) by Fin. Activities	-0.550
Risk Free Rate		2.30%	1.35%	Net increase (decrease) in cash	0.333
Market Returns (common)		13.00%	14.50%	Beginning Cash Balance	0.778
Beta (implied)		1.15	1.15	Ending Cash Balance	1.111

<sup>16</sup> 2020 and 2021 Financial Statements reported (2020) and projected (2021) on 8/31/2021

## Appendix B – Canadice Lake Technologies 2009 (projected) and 2010 Financial Statements (forecast)<sup>17</sup>

Canadice Lake Technologies						Canadice Lake Technologies			
Balance Sheet (millions)						Income Statement (millions)			
Year Ending December 31						January 1 - December 31			
	2009 actual	2010 forecast		2009 actual	2010 forecast		2009 actual	2010 forecast	
<b>Current Assets</b>			<b>Current Liabilities</b>			<b>Revenues</b>			
Cash & Securities	1.624	(1.568)	Accounts Payable	0.016	0.047	Product Sales	0.000	5.000	
Accounts Receivable	-	-	Wages Payable	0.035	0.126	Consulting Income	0.000	1.250	
Inventory	-	-	Accrued Liabilities	-	-	Royalties	0.000	0.000	
<b>Total</b>	<b>1.624</b>	<b>(1.568)</b>	<b>Total</b>	<b>0.051</b>	<b>0.173</b>	Equipment Leasing	0.000	0.000	
						Service and Repairs	0.000	0.000	
<b>Fixed Assets</b>			<b>Long Term Debt</b>			<b>Total Revenue</b>	<b>0.000</b>	<b>6.250</b>	
Real Estate	-	-	Angel Debt	-	-				
Technology	0.055	0.395	SBA Loans	1.000	1.000	<b>Cost of Good Sold</b>			
Equipment	0.236	1.260	<b>Total</b>	<b>1.000</b>	<b>1.000</b>	Panels & Components	0.000	3.100	
Cost of Replacement	-	-				Storage Tech	0.000	1.764	
<b>Total</b>	<b>0.291</b>	<b>1.655</b>	<b>Owner's Equity</b>			<b>Total COGS</b>	<b>0.000</b>	<b>4.864</b>	
			Common Stock	1.500	1.500				
			Preferred Stock	-	-	<b>Gross Profit</b>	<b>0.000</b>	<b>1.386</b>	
			Accumulated Retained Earnings	(0.636)	(2.586)				
			<b>Total</b>	<b>0.864</b>	<b>(1.086)</b>	<b>Operating Expenses</b>			
<b>Total Assets</b>	<b>1.915</b>	<b>0.087</b>	<b>Total Liabilities and Owner's Equity</b>	<b>1.915</b>	<b>0.087</b>	Production & Service	0.000	1.015	
						Engineering Salaries	0.120	0.450	
						Management Salaries	0.150	0.150	
						Marketing & Sales	0.085	0.170	
						General & Admin	0.129	0.368	
						Depreciation & Amortization	0.042	0.413	
						<b>Total Expenses</b>	<b>0.526</b>	<b>2.566</b>	
						<b>Operating Income</b>	<b>-0.526</b>	<b>-1.180</b>	
						<b>Non-Operating Expenses</b>			
						Interest Paid	0.110	0.220	
						<b>Total Non-Operating Expenses</b>	<b>0.110</b>	<b>0.220</b>	
						<b>Taxable Income</b>	<b>-0.636</b>	<b>-1.400</b>	
						Taxes Paid	0.000	0.000	
						<b>Net Income</b>	<b>-0.636</b>	<b>-1.400</b>	
						<b>Distribution of Earnings</b>			
						Dividends (Common)	0.000	0.000	
						Dividends (Preferred)	0.000	0.550	
						<b>Addition to Retained Earnings</b>	<b>-0.636</b>	<b>-1.950</b>	

  

Additional Financial Information				Cash Flow Statement			
	2009 actual	2010 forecast			2009 actual	2010 forecast	
<b>Common Equity</b>			<b>Cash Provided (used) by Operations</b>				
Shares Outstanding (millions)	15.000	15.000	Net Income	(0.636)	(1.400)		
12/31 Price per Share	-	(0.410)	Plus Depreciation & Amortization	0.042	0.413		
Value (millions)	-	(6.146)	Change in Working Capital				
<b>Preferred Equity (2:1 preferred to common)</b>			Decrease (increase) in AR	-	-		
Shares Outstanding (millions)	5.000	5.000	Decrease (increase) in Inv	-	-		
12/31 Price per Share	-	(0.205)	Increase (decrease) in AP	0.051	0.122		
Value (millions)	-	(1.024)	Increase (decrease) in Other CL	-	-		
<b>Valuation</b>			<b>Cash Provided (used) by Operations</b>	<b>(0.543)</b>	<b>(0.865)</b>		
EBITDA Multiple	6.0	6.0	<b>Cash Provided (used) by Investments</b>				
Estimated Value	(2.904)	(4.602)	Additions to Net Fixed Assets	(0.291)	(1.364)		
Equity (Common & Pref)	(2.280)	(7.170)	Depreciation	(0.042)	(0.413)		
Pref to Common Conversion Ratio	2.0	2.0	<b>Cash Provided (used) by Investments</b>	<b>(0.333)</b>	<b>(1.777)</b>		
<b>Debt Information</b>	<b>Rate</b>	<b>Term (years)</b>	<b>Issued</b>	<b>Cash Provided (used) by Financing Activities</b>			
Angel Debt	9.00%	20	2010	Additions (reductions) to Debt	1.000	-	
SBA Loans	11.00%	30	2009	Net Issues (repurchases) of Stock	1.500	-	
Current Yield	7.00%			Dividends (Paid)	-	(0.550)	
				<b>Cash Provided (used) by Fin. Activities</b>	<b>2.500</b>	<b>(0.550)</b>	
Risk Free Rate		3.87%	3.52%	<b>Net increase (decrease) in cash</b>	<b>1.624</b>	<b>(3.192)</b>	
Market Returns (common)		13.00%	14.50%	<b>Beginning Cash Balance</b>	<b>-</b>	<b>1.624</b>	
Beta (implied)		-	-	<b>Ending Cash Balance</b>	<b>1.624</b>	<b>(1.568)</b>	

<sup>17</sup> 2009 and 2010 Financial Statement projection (2009) and forecast (2010) on 9/30/2009

**Appendix C – Canadice Lake Technologies, Inc. Management Salary Detail<sup>18</sup>**

<b>Name</b>	<b>Position</b>	<b>2009 Salary Received</b>	<b>2009 Market Compensation</b>	<b>2021 Salary Received</b>	<b>2021 Market Compensation</b>
Jessica Rene	Founder	50,000	100,000	200,000	200,000 <sup>19</sup>
Becca Ashby	Founder	50,000	100,000	200,000	200,000 <sup>11</sup>
Lauren Zahm	Founder	50,000	100,000	200,000	200,000 <sup>11</sup>
Anna Kendall	Engineer	65,000	90,000	150,000	175,000
Sean Riccardelli	Engineer	55,000	75,000	140,000	165,000
Rick Taylor	Sales	85,000	85,000	NA	NA
Earl Richards	CFO	NA	NA	175,000	195,000
Eshana Bastini	CTO	NA	NA	150,000	175,000
Sheri Johnson	Sales & Mkt	NA	NA	200,000	225,000
John Craig	Chair	NA	NA	75,000	75,000

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<sup>18</sup> Fields with “NA” denote the individual was not actively employed with or engaged by CTL during the reference period

<sup>19</sup> Market Compensation for Founders is a subjective measure. The ongoing contribution of Founders in the firm is often challenging to measure.