



NXT ENERGY SOLUTIONS INC

As at and for three and nine months ended September 30, 2010

MANAGEMENT'S DISCUSSION AND ANALYSIS

As used in this MD&A, the terms "we", "us", "our", "NXT" and "company" mean NXT Energy Solutions Inc.

Our functional and reporting currency is the Canadian dollar. All references to "dollars" in this MD&A refer to Canadian or Cdn. dollars unless specific reference is made to United States or U.S. dollars.

Forward-Looking Statements

Certain statements in this document may constitute "forward-looking statements". These forward-looking statements can generally be identified as such because of the context of the statements including words such as "believes", "anticipates", "expects", "plans", "estimates" or words of a similar nature.

These forward-looking statements are based on current expectations and are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Except as required by law, the company assumes no obligation to update forward-looking statements should circumstances or the company's estimates or opinions change.

Description of Business

NXT is a Calgary based company providing airborne survey solutions that enable our clients to focus their exploration decisions concerning land commitments, data acquisition expenditures or prospect prioritization onto the areas with the greatest hydrocarbon potential. Utilizing its proprietary airborne Stress Field Detection ("SFD®") survey system, NXT provides a unique survey method that is environmentally noninvasive and unaffected by ground security issues or difficult terrain. Additionally, surveys can generally be conducted year round and are effective both onshore and offshore. The advantage to NXT's clients is an efficient and reliable method to explore for hydrocarbons.

On September 22, 2008 the company changed its name from Energy Exploration Technologies Inc to NXT Energy Solutions Inc. This change was approved by shareholders at the November 29, 2007 Annual General Meeting. The name change was implemented to better reflect our principal activities and now aligns with the NXT trademark. SFD® and NXT® in Canada and the U.S. are the registered trademarks of NXT Energy Solutions Inc.

Overall Performance

The company encountered delays in closing sales opportunities within our primary market of Colombia in the third quarter of 2010 and accordingly the Company did not record any SFD survey revenue in the third quarter of 2010. The conditions which gave rise to these delays have continued into the fourth quarter of 2010. In response to these reduced sales opportunities we have broadened our marketing activities to now include two new countries; Peru and Pakistan.

The delays in the Colombia market were largely driven by problems in the award of concession blocks following the 2010 Colombian Bid Round submissions in July of 2010. ANH, the Colombian regulatory body, delayed the formal award of concession blocks pending appeals made by a few unsuccessful bidder companies. The successful bidder companies have accordingly suspended awarding contracts to service providers, such as NXT, as they await formal concession awards. We anticipate these formal awards to occur prior to the end of 2010 and with these awards the opportunities for closing SFD survey contracts will resume.

The Company remains committed to the Colombian market as Colombia provides a strong market for our SFD services. We continue with active sales initiatives in this country including maintaining ongoing dialogue with Colombian companies who have stated their intention to conduct SFD surveys upon receiving formal concession block awards and offering previously acquired Colombian SFD data to interested clients.

In the third quarter the Company had responded to a request for information from a Pakistan E & P company. This Pakistan company has now conducted extensive due diligences on SFD and NXT including a review of technical material, obtaining written references from NXT clients from both Canada and Colombia plus receiving several technical presentation from NXT personnel in Pakistan.

This process has resulted in NXT receiving a sole source request-for-proposal to conduct an SFD survey in Pakistan. NXT's bid was submitted on November 2 and this bid has now successfully completed both technical and financial reviews by this potential customer. We are in the process of awaiting a contract award which we anticipate closing. The survey is for \$2.66 million with the survey scheduled to commence in the first quarter of 2011. Notwithstanding these positive developments there can be no assurance that this process will result in a contract award.

In addition, as previously announced, in the third quarter the Company engaged a respected Peruvian representative to act as our non-exclusive sales representative in the country.

With cash and short term investments we forecast having the required cash to operate for the balance of the year without any additional sources of cash. Our ability to continue as a going concern will ultimately be dependent upon our ability to sustain positive cash flow from operations and/or obtain additional financing. There is significant doubt about the appropriateness of the use of the going concern assumption because the company has experienced losses in 2008 through to the present, has experienced negative cash flow from operations over these years and management believes working capital as at September 30, 2010 of \$1.7 million is not sufficient to support the company's operations for the next twelve months without additional revenue or capital. Our cash and equivalents and short term investments held on account as of November 24, 2010 is \$1,843,467.

Results of Operations

The company reported a net loss of \$962,590 and \$3,175,735 for the three months and nine months respectively ended September 30, 2010 (compared to a net loss of \$969,591 and \$1,733,667 for the same periods in 2009), representing an overall increase in loss of \$1,442,068 for the period. The increase is primarily the result of the increase in expenses associated with opening a Colombian branch in order to meet the legal requirements of continuing to do business in that country as well as marketing expenses as we continue to focus our efforts in Colombia.

Revenue

	For the three months ended Sep. 30,		For the nine months ended Sep. 30,	
	2010	2009	2010	2009
SFD® survey revenue	\$ -	\$ -	\$ 443,011	\$ 2,638,560
Oil & gas revenue	820	447	4,162	874
Total revenue	\$ 820	\$ 447	\$ 447,173	\$ 2,639,434

SFD® Survey Revenue

In the first nine months of 2010 the company recognized \$443,011 of SFD® survey revenue related to one contract for a Colombian client (Q2 2009 - \$2,638,560).

Expenses

	For the three months ended Sep. 30,		For the nine months ended Sep. 30,	
	2010	2009	2010	2009
SFD® survey cost	\$ 5,275	\$ (26,888)	\$ 466,290	\$ 1,078,812
Oil and natural gas operating expenses	5,471	-	4,195	6,818
Administrative	908,417	1,064,739	3,030,428	3,096,660
Amortization and depreciation	38,880	44,871	124,402	130,547
	\$ 958,043	\$ 1,082,722	\$ 3,625,315	\$ 4,312,837

Expenses - for the three months and nine months ended September 30, 2010 and 2009

SFD® survey costs - to date in 2010 we have had survey costs of \$466,290 (\$1,078,812 - nine months ended September 30, 2009) which includes non-revenue survey costs of \$151,544 (nil - 2009) and commissions on sales of \$13,662 (\$127,032 - 2009).

Administrative - the decrease of \$66,232 in the first nine months of 2010 (Q3 2010 - \$156,322 decrease) in comparison to the first nine months of 2009 relates mainly to decreases in stock based compensation due to the expiration of contractor options, investor communications and relations fees, legal fees and marketing and advertising being offset by increases in consulting fees for Colombian personnel.

Other Expense (Income)

	For the three months ended Sep. 30,		For the nine months ended Sep. 30,	
	2010	2009	2010	2009
Interest income	\$ (3,982)	\$ (8,953)	\$ (7,476)	\$ (78,177)
Loss on foreign exchange	8,434	158,588	1,286	132,817
Loss (gain) on sale of property	-	(21)	1,074	(1,037)
Abandonment	915	1,558	2,709	6,661
Other expense (income)	\$ 5,367	\$ 151,172	\$ (2,407)	\$ 60,264

Interest income - interest income is offset by interest expense resulting in \$3,982 of income in Q3 2010 (cumulative \$7,476) as compared to \$8,953 of income in Q3 2009 (cumulative \$78,177). In 2009 our investments matured generating interest income at pre-market downturn rates. These investments were then re-invested at the lower interest rates available from financial institutions due to the downturn in the economy. Also, some investments have been redeemed for ongoing operations.

Loss or gain on foreign exchange - loss or gain on foreign exchange is caused by changes in the relative exchange values of the U.S. dollar, Canadian dollar and Colombian peso. For example, when the Canadian dollar trades higher relative to the U.S. dollar or COP, cash held in U.S. dollars or COP will decline in value and this decline will be reflected as a foreign exchange loss in the period.

Loss (gain) on sale of property - the company sold its sole vehicle in the first quarter of 2009 and realized a gain of \$1,016; in the first quarter of 2010 the company disposed of two older computers that had not yet fully depreciated.

Summary of Quarterly Results (unaudited)

	Sep 30, 2010	Jun 30, 2010	Mar 31, 2010	Dec 31, 2009
Revenue	\$ 820	\$ 444,958	\$ 1,395	\$ 1,044,889
Net income (loss)	(962,590)	(890,673)	(1,322,472)	(657,401)
Basic earnings (loss) per share	(0.03)	(0.03)	(0.04)	(0.02)
Diluted earnings (loss) per share	\$ (0.03)	\$ (0.03)	\$ (0.04)	\$ (0.02)

	Sep 30, 2009	Jun 30, 2009	Mar 31, 2009	Dec 31, 2008
Revenue	\$ 447	\$ 2,638,759	\$ 228	\$ 6,153
Net income (loss)	(969,591)	283,005	(1,047,081)	(945,394)
Basic earnings (loss) per share	(0.03)	0.01	(0.03)	(0.04)
Diluted earnings (loss) per share	\$ (0.03)	\$ 0.01	\$ (0.03)	\$ (0.04)

Q3 2010 to Q2 2010 comparison; the company recognized nil in survey revenue and \$72,899 in stock based compensation expense in Q3 (respectively \$443,011 and 100,864 - Q2).

Q2 2010 to Q1 2010 comparison: the company recognized \$443,011 in survey revenue, \$100,864 in stock based compensation expense and recorded \$342,959 in survey costs in Q2 (respectively nil, \$69,356 and \$118,056 - Q1).

Q1 2010 to Q4 2009 comparison: the company recognized no survey revenue, \$69,356 in stock-based compensation expense and recorded no survey costs in Q1 (respectively \$1,044,766, \$187,343 and \$508,308 - Q4).

Q4 2009 to Q3 2009 comparison: the company recognized \$1,044,766 in survey revenue in Q4 (nil - Q3) and recognized \$187,343 in stock-based compensation expense (\$112,254 - Q3).

Q3 2009 to Q2 2009 comparison: the net loss in Q3 is due to the company recognizing no survey revenue in Q3 (\$2,638,560 - Q2).

Q2 2009 to Q1 2009 comparison: the company recognized \$2,638,560 in survey revenue in Q2 (nil - Q1) for one completed international survey contract resulting in net income. Our expenses in the second quarter are higher due to the ramp up required for executing an international survey contract as well as increased costs as we pursue marketing to foreign markets.

Q1 2009 to Q4 2008 comparison: the increased net loss in Q1 2009 over Q4 2008 of \$115,744 is due to additional salary costs incurred with the hiring of a COO to augment our senior management staff, fees for a geosciences consultant, higher stock-based compensation costs and costs incurred for the NAPE conference in Houston, Texas.

Q4 2008 to Q3 2008 comparison: the company recognized no survey revenue in Q4 (\$1,200,000 in Q3 from one completed survey contract) and recognized \$207,457 in stock-based compensation expense (\$144,843 - Q3).

Liquidity and Capital Resources

The company's cash position at September 30, 2010 continues to be adequate to support operations for 2010. Our cash and equivalents and short term investments held on account as of November 24, 2010 is \$1,843,467.

With cash and short term investments we forecast having the required cash to operate for the balance of the year without any additional sources of cash. Our ability to continue as a going concern will ultimately be dependent upon our ability to sustain positive cash flow from operations and/or obtain additional financing. There is significant doubt about the appropriateness of the use of the going concern assumption because the company has experienced losses in 2008 through to the present, has experienced negative cash flow from operations over these years and management believes working capital as at September 30, 2010 of \$1.7 million is not sufficient to support the company's operations for the next twelve months without additional revenue or capital.

The following table summarizes the change in cash flow for the three and nine months ended September 30, 2010 and 2009:

	For the three months ended Sep. 30,		For the nine months ended Sep. 30,	
	2010	2009	2010	2009
Cash generated (used) in operating activities	\$ (829,331)	\$ 959,366	\$ (1,970,501)	\$ (1,116,501)
Cash generated by financing activities	(2,192)	(2,015)	48,077	44,320
Cash used in investing activities	233,540	819,527	(1,906,432)	6,596,081
	\$ (597,983)	\$ 1,776,878	\$ (3,828,856)	\$ 5,523,900

Operating Activities

Q3 2010 - the \$829,331 cash balance used in operating activities reflects our net loss of \$962,590 adjusted for \$112,694 of non-cash deductions and a change of \$20,682 in non-cash working capital. For the first nine months of 2010 the \$1,970,501 cash balance used reflects a net loss of \$3,175,735 adjusted for \$301,948 of non-cash deductions and a change of \$903,602 in non-cash working capital.

Q3 2009 - the \$959,366 cash balance generated in operating activities reflects our net loss of \$969,591 adjusted for \$157,829 of non-cash deductions and a change of \$1,771,128 in non-cash working capital. For the first nine months of 2009 the \$1,116,501 cash balance used reflects a net loss of \$1,733,667 adjusted for \$616,402 of non-cash deductions and a change of \$764 in non-cash working capital.

Financing Activities

Q3 2010 - \$2,192 was paid on our capital lease (\$6,441 paid on capital lease in the first nine months of 2009). In the first nine months of 2009 \$54,518 was raised through the exercise of options.

Q3 2009 - \$2,015 was paid on our capital lease (\$5,919 paid on capital lease in the first nine months of 2009). In the first nine months of 2009 \$50,239 was provided through the issuance of a private placement, net of issue costs.

Investing Activities

Q3 2010 - we decreased our short term investments by \$197,429 and decreased restricted cash by \$45,967 (first nine months of 2010 - \$1,803,884 increase and \$43,971 increase respectively). We used \$9,856 for other property and equipment (\$58,978 for first nine months of 2010).

Q3 2009 - we decreased our short term investments by \$848,003 (first nine months of 2009 - \$6,748,105); due to lower interest rates maturing short term investments were re-invested into premium money market accounts that are secured by a major Canadian financial institution.

Contractual Commitments

The company has an office lease until October 31, 2012 which requires minimum monthly lease payments of \$31,871.

Transactions with Related Parties

An officer of the company exercised 50,000 options in the first quarter of 2010.

Additional Disclosures

Outstanding share data

	As at November 24, 2010	As at December 31, 2009
Outstanding securities		
Common shares	30,801,796	30,701,796
Preferred shares	10,000,000	10,000,000
Options	2,407,104	2,757,204
Total	43,208,900	43,459,000

Critical Accounting Estimates

Factors are substantially unchanged; refer to annual MD&A as at December 31, 2009.

Change in Accounting Policies Including Initial Adoption

Factors are substantially unchanged; refer to annual MD&A as at December 31, 2009.

For additional information on NXT Energy Solutions Inc. please consult our web page at www.nxtenergy.com, or the SEDAR webpage at <http://www.sedar.com>.