



NXT ENERGY SOLUTIONS INC.

Management's Discussion and Analysis

As at and for the year ended December 31, 2011

The following management's discussion and analysis ("MD&A") was prepared by management based on information available as at April 26, 2012 and should be reviewed in conjunction with the audited Consolidated Financial Statements for the year ended December 31, 2011. This MD&A is for the 3 month ("Q4-11") and 12 month year-to-date ("2011 YTD") periods ended December 31, 2011, with comparative 2010 totals for the 3 month ("Q4-10") and 12 month year-to-date ("2010 YTD") periods ended December 31, 2010.

As used in this MD&A, the terms "we", "us", "our", "NXT" and the "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 US 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", "intends", "estimates", "scheduled" or words of a similar nature.

Forward-looking statements used in this MD&A relate primarily to:

- estimates of the amount and expected timing of revenue and costs related to existing SFD® survey contracts that are being conducted in 2012 in Guatemala and Argentina, as well as other contracts that are planned to be conducted in South Asia and Colombia. As at December 31, 2011, these contracts had a potential future revenue value (including amounts billed but deferred as at December 31, 2011) of approximately US \$8.9 million.
- the material factors and assumptions which affect this forward-looking information include assumptions that NXT will have the personnel, equipment and required local permits to conduct the contracts as intended in 2012, and that the as yet unperformed survey contracts will not be cancelled or subject to any additional material delays.
- potential future growth opportunities in new international markets, such as Brazil and Mexico.
- potential financing related activities, including the potential future exercise of outstanding warrants that were issued in March 2012, and their related effect on liquidity and capital resources.
- the Company's ability to continue as a going concern.
- estimated future costs related to asset retirement obligations.
- limitations in disclosure controls, procedures, and internal controls over financial reporting.

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 the Business

NXT is a Calgary based public company that provides a unique survey service to the oil and natural gas exploration industry. NXT's proprietary Stress Field Detection ("SFD®") survey technology is based on detecting subtle changes in earth's gravity field from an airborne platform. SFD® data gathered is analyzed and can be used to find variations in sub-surface geological stress patterns - indicators of potential reservoir and trap formations. NXT's surveys provide an effective and cost efficient method for clients to focus their decisions related to land commitments and the acquisition of traditional seismic data that is used to locate and delineate exploration prospects.

Our goal is to aid our clients in reducing their overall time, cost, and risk in their exploration programs. The SFD® survey method is environmentally non-invasive and is unaffected by ground security issues or difficult terrain. Additionally, SFD® surveys can generally be conducted year round and are effective both onshore and offshore. SFD® and NXT® in Canada and the U.S. are the registered trademarks of NXT Energy Solutions Inc.

NXT's technology is very attractive for use as an early stage exploration tool in frontier and under-developed areas - as such, we have been seeking to expand our presence in growing new international exploration markets such as Latin America and Africa.

Overall Performance - Business Overview

In 2011, NXT signed a number of significant new contracts to conduct SFD® surveys in international markets, an indication of growing customer awareness of and desire to utilize our proprietary survey technology. Timing of finalization of the contracts was such that commencement of the largest two projects (Colombia and Argentina) did not occur until the Q4-2011 period, and final completion of the contracts was subsequent to the December 31, 2011 year-end. The 2011 fiscal year thus reflects only US \$150,000 of revenues from a project conducted in Q2-2011. A summary of the status of the US \$9 million of new survey contracts which were entered into in 2011 and to date in 2012 is as follows:

	contract completion, or estimated completion	contract value in US \$ millions	amounts billed to December 31 2011
Montana, USA	Q2-2011	0.2	0.2
Colombia - 4 contracts commenced in Q4-2011, completed in Q1-2012	Q1-2012	2.9	1.7
Argentina - data acquisition commenced in February 2012	Q2-2012	1.6	0.1
Guatemala - data acquisition commenced in April 2012	Q2-2012	0.7	-
		<u>5.4</u>	<u>2.0</u>
South Asia project - contract awarded, awaiting final regulatory approvals of survey flights	unknown	2.7	-
Colombia - last of the 6 blocks covered under a May 2011 Letter of Intent	unknown	1.0	-
		<u>9.1</u>	<u>2.0</u>

The majority of the amounts billed to December 31, 2011 were collected before year end, with the remainder collected in early January 2012. The remaining progress billings are generally due within 30 days after delivery of NXT's final report on data interpretation and the related prospect recommendations to the client.

Additional information on these survey projects is as follows:

- Montana, USA - this was a small pilot survey on an oil project which was completed for a Calgary based client in Q2-2011.
- Colombia - In Q2-11, NXT announced a letter of intent ("LOI") with a major Canadian public exploration and production company to conduct a US \$4.6 million SFD® survey on 6 separate exploration blocks in Colombia and Guatemala. We are proud that this represented a major validation of the technology, in the form of a significant repeat customer order. SFD® data acquisition operations were completed on 4 survey blocks in Colombia in the October to December period, and the final interpretation of the data, and delivery of the reports on findings and recommendations to the client, was completed in mid January 2012. As such, the related revenues of US \$2.9 million will be recognized in NXT's Q1-2012 period. Survey operations on the fifth block, in Guatemala, are discussed below. The LOI also contemplates the last of the six surveys being conducted on another Colombia block, but terms of this survey (expected value of US \$1 million) have not yet been finalized. Execution of a survey on this sixth block will be planned in conjunction with other new survey opportunities which may arise in the Colombia area for late 2012 and 2013.
- Argentina - a US \$1.65 million survey contract was executed in September 2011, and survey operations commenced in mid December with mobilization to Argentina following completion of the 4 block Colombia survey. We were pleased to gain a foothold in Argentina, which has an attractive profile of large frontier exploration areas suited to conduction of early stage SFD® exploration surveys. While the actual survey flying time was very efficient (9 days total), the overall project took much longer than expected to start and complete, due to numerous regulatory delays in the aircraft importation and permitting process. In addition, our survey aircraft required repairs following completion of the survey and prior to departure from Argentina, which again was subject to ongoing regulatory delays. Data acquisition was completed in March 2012, and the data interpretation and the related delivery of the SFD report and recommendations to the client is expected to be completed in the Q2-2012 period.
- Guatemala - this smaller survey was conducted in early April 2012, following departure of our survey crew from Argentina. This survey has a contract value of US \$0.7 million, which is expected to be recognized in the Q2-2012 period, following interpretation and recommendations on the data acquired.
- South Asia - in early 2011, NXT finalized a US \$2.7 million survey contract to be conducted in South Asia. This project unfortunately encountered ongoing flight permitting delays, as multiple government agencies have a role in the permitting process. NXT, in conjunction with our local agent, advanced the project in 2011, and the client and key government decision makers provided support for our SFD® survey. The permitting process has now advanced to its final stages, and is pending approval of the flight areas by one of the government agencies. The next step is the receipt of a final No Objections Certificate ("NOC") from the relevant parties.

While we recognize that the overall time frame from initial client interest, through contract finalization and contract execution can be very lengthy, we are pleased with the advances made in 2011 and to date in 2012. Our focus on Colombia and Latin America remains unchanged - our growing position in the Colombian market will hopefully be the catalyst for new sales expansion in Latin America. A key expansion objective for 2012 will be to make new in-roads into the very large exploration markets in Mexico and Brazil.

We will also continue to pursue survey opportunities within the North America market. NXT plans to continue to broaden the profile of SFD® within our target markets through the generation and dissemination of SFD® case studies, which are an effective tool to showcase SFD® capabilities and to educate the industry about the value of our service.

Another accomplishment in 2011 was finalizing the terms on a gross over-riding royalty ("GORR") in Q3 on a prior survey project which had been conducted in Canada prior to 2010. NXT holds a GORR which averages 1.5% on future gas production that may eventually become developed on a sizeable prospect (which is not yet on production) in the Horn River Basin of north-east British Columbia, an area which is one of North America's largest new shale gas resource plays. This GORR is an example of the flexibility of NXT's business model, under which traditional fees for service can be combined with success fees and / or GORRs. No revenue has been generated to date from this GORR. In 2011, NXT earned minimal GORR revenue (which is recognized in the month in which it is earned) from other wells in which it has a GORR interest.

In 2011, NXT continued to experience limited working capital availability, which was impaired due to delays in being able to generate new cash flows from awarded, but pending, survey contracts. Risks related to having sufficient working capital to execute existing and potential new contracts is mitigated through our normal practice of obtaining partial pre-payments from clients at the start of surveys, and issuing interim progress billings during the projects. In order to enhance our financial resources, in March 2012 NXT raised US \$2.2 million by issuing Units (at US \$0.75 per Unit, which consisted of one common share plus one common share purchase warrant) under a private placement equity financing.

Near-term Outlook for 2012 and beyond

Through the balance of 2012 and into 2013, NXT plans to continue to increase brand awareness, be more active in publishing technical papers, and increase recognition of SFD® at international trade shows and seminars. Our focus will be on National Oil Companies, small to mid-cap exploration and production ("E&P") companies, and when opportunities arise, the major E&P companies. A potential new market we are also now approaching is the seismic acquisition companies that sell large scale "Multi-Client" survey programs (primarily off-shore). Geographically, NXT will continue to pursue projects in Latin America - specifically in Colombia, Peru, Ecuador, Brazil and Mexico. NXT will also address the frontier areas of Africa and Asia, particularly where Canadian and American E&P companies are operating. The Arctic is also a longer term target as is the geography north of the 60th parallel.

As NXT pursues these markets, our strategy is to identify and retain high quality local sales rep agents with the key knowledge of the area, the clients and our upstream sector of the E&P service opportunities. This allows us to cover much larger areas and more clients with minimum fixed cost. Recently, we have been successful in securing new reps in Mexico and Colombia, and are in process of securing new agents to represent NXT in Kuwait and Costa Rica.

Near term contract and revenue opportunities through the remainder of 2012 and into 2013 include several clients in South Asia, Mexico, Brazil, Kuwait, and the current Latin America areas of activity (Colombia and Peru).

Some of our objectives to allow additional growth include opening a Houston office, expanding our SFD® equipment capacity, and adding to our core group of Interpretation staff and our ability to provide integration of SFD® with geology/geophysics. Protection of our Intellectual Property (patenting and new R&D initiatives) should also serve to allow us to expand on industry awareness and acceptance of the SFD® technology.

Selected Annual Financial Information

	2011	2010	2009
Survey revenue	144,650	443,011	3,683,326
Net loss	(3,584,601)	(4,452,428)	(2,405,125)
Net loss per share (basic and diluted)	(0.10)	(0.14)	(0.07)
Net cash from (used in) operating activities	(1,756,515)	(2,692,776)	(2,580,308)
Cash and short-term investments	1,518,946	1,370,234	4,174,145
Total assets	3,274,928	2,046,906	6,005,640
Long term liabilities	57,953	62,597	251,903

Results of Operations

The nature of NXT's business is such that operating results are not readily comparable on a quarter to quarter, or year over year basis. This is because revenues are derived from periodic large value survey projects, which can be conducted in a relatively short time frame, but can have a large effect on any single period in which they occur. In both 2011 and 2010, all of the year-to-date revenues were earned in the Q2 periods.

Survey revenues were much higher in 2009 as it reflected a high level of activity, with three separate survey contracts completed, as compared to only one in each of 2010 and 2011. In 2011, several sizable new contracts were secured, but revenues from these contracts will not become recognized until subsequent to 2011.

Summary of Quarterly Results (Unaudited)

A summary of operating results for each of the trailing 8 quarters follows. The extent of the loss each quarter is mainly due to the timing of survey contract activity, and variances in Stock Based Compensation Expense ("SBCE"), which can occasionally be a significant expense in any given quarter.

	Q4-11 Dec 31, 2011	Q3-11 Sep 30, 2011	Q2-11 Jun 30, 2011	Q1-11 Mar 31, 2011
Survey revenue	\$ -	\$ -	\$ 144,650	\$ -
Net loss	(1,072,560)	(1,026,814)	(692,510)	(792,717)
Basic and diluted loss per share	(0.03)	(0.03)	(0.02)	(0.02)

	Q4-10 Dec 31, 2010	Q3-10 Sep 30, 2010	Q2-10 Jun 30, 2010	Q1-10 Mar 31, 2010
Survey revenue	\$ -	\$ -	\$ 443,011	\$ -
Net loss	(1,276,693)	(962,590)	(890,673)	(1,322,472)
Basic and diluted loss per share	(0.04)	(0.03)	(0.03)	(0.04)

Q4-11 to Q3-11 comparison - NXT had survey revenue of \$nil (\$nil in Q3-11), SBCE of \$50,015 (\$246,000 in Q3-11) and \$nil survey costs (\$nil in Q3-11).

Q3-11 to Q2-11 comparison - NXT had survey revenue of \$nil (\$144,650 in Q2-11), SBCE of \$246,000 (\$18,843 in Q2-11) and \$nil survey costs (\$43,990 in Q2-11). The high total SBCE recorded in Q3-11 was due to the large number of stock options granted in Q3-11, and the fact that 42% of such had immediate vesting.

Q2-11 to Q1-11 comparison - NXT had survey revenue of \$144,650 (\$nil in Q1-11), SBCE of \$18,843 (\$29,942 in Q1-11) and survey costs of \$43,990 (\$nil in Q1-11).

Q1-11 to Q4-10 comparison - NXT recognized \$nil survey revenue (\$nil in Q4-10) and SBCE of \$29,942 (\$404,053 in Q4-10). The \$374,111 decrease in SBCE from Q4-10 is attributed to nearly all contractor options being fully vested in Q1-11 and the large expense that was recognized in Q4-10 upon re-pricing of stock options to \$0.63 per share.

Q4-10 to Q3-10 comparison - NXT recognized \$nil in survey revenue (\$nil in Q3-10) and SBCE of \$404,053 (\$72,899 in Q3-10). The increase in SBCE was due to a one-time valuation adjustment that occurred when 2,113,204 stock options were re-priced in December 2010 to a new exercise price of \$0.63 per share.

Q3-10 to Q2-10 comparison - in Q3-10 NXT had \$nil survey revenue (\$443,011 in Q2-10) and SBCE of \$72,899 (\$31,507 in Q2-10).

Q2-10 to Q1-10 comparison - in Q2-10 NXT recognized survey revenue of \$443,011 (\$nil for Q1-10), SBCE of \$31,507 (\$69,356 for Q1-10) and survey costs of \$342,959 (\$118,056 for Q1-10).

Q1-10 to Q4-09 comparison - in Q1-10 NXT had \$nil survey revenue (\$1,044,766 in Q4-09), SBCE of \$69,356 (\$187,343 for Q4-09) and \$118,056 survey costs (\$508,308 for Q4-09). The survey costs in Q1-10 were for non-revenue projects.

Overall, NXT incurred a loss of \$1,072,560 for Q4-11 as compared to a loss of \$1,276,693 for Q4-10. For 2011 YTD, the loss was \$3,584,601 as compared to \$4,452,428 for 2010 YTD. The lower loss for 2011 YTD was primarily due to lower levels of survey costs, G&A expense, and stock based compensation expense, as discussed below.

Revenue

	Q4-11	Q4-10	2011 YTD	2010 YTD	2009 YTD
Survey revenue	\$ -	\$ -	\$ 144,650	\$ 443,011	\$ 3,683,326

In 2011, NXT earned SFD® survey revenue of US \$150,000 from a small project conducted in Montana, USA.

Four separate surveys were flown by NXT in Q4-11, but under the completed contract method of revenue recognition applied by NXT, this revenue will be recognized in the Q1-2012 period, in which the projects were completed.

In 2010, NXT had revenue from a contract with a new client in Colombia. In 2009, revenues were earned from two large surveys for new clients in South America.

Expenses

	Q4-11	Q4-10	2011 YTD	2010 YTD	2009 YTD
Survey costs	\$ 877	\$ 138	\$ 46,713	\$ 466,428	\$ 1,587,120
General and administrative ("G&A")	983,863	822,141	3,218,143	3,678,806	3,569,079
Stock based compensation expense ("SBCE")	50,015	404,052	344,800	577,815	672,060
Amortization and depreciation	45,882	39,663	160,478	164,065	175,900
	<u>1,080,637</u>	<u>1,265,994</u>	<u>3,770,134</u>	<u>4,887,114</u>	<u>6,004,159</u>

- **SFD® survey costs** - the 2010 YTD total of \$466,428 included approximately \$118,000 of costs for conducting research related surveys which did not generate revenues. There was a much higher level of survey costs in 2009 due to the \$3,683,326 of revenues generated.
- **G&A expense** - the \$460,663 or 13% decrease in G&A expenses for 2011 YTD as compared to 2010 YTD is a combination of several factors, including administrative personnel cutbacks imposed in late 2010. In addition, significant initial start-up costs for the Colombia branch office were reflected in the Q1-10 period. Also, in Q4-11 the Colombia branch recorded a \$58,330 recovery of a bad debt allowance which had been recorded in 2010.

G&A for Q4-11 increased by \$161,722 or 20% to a total of \$983,863 as compared to \$822,141 for Q4-10 primarily due to an accrual for wages and Board of Director fees which had been subject to a 15% reduction in place since October 1, 2010. A total of \$189,000 was accrued as at the end of Q4-11 once it was determined that a significant total of the progress payments were received on the new Colombia contracts, and that NXT would have expanded ability to fund ongoing operations. Even in periods of high survey activity, G&A is a major component of NXT's total expenses. The categories included in the 2011 YTD total, as compared to 2010 YTD, was as follows:

	2011 YTD	2010 YTD
Salaries, benefits and consulting charges	\$ 1,725,237	\$ 1,840,743
Board, professional fees, and public company costs	560,416	496,299
Premises and administrative overhead	520,689	589,609
Business development	274,454	240,759
Colombia office	137,347	511,396
total G&A	<u>3,218,143</u>	<u>3,678,806</u>

SBCE - The higher SBCE in 2010 was mainly due to significant expense which was recognized in Q4-10 upon re-pricing of all outstanding NXT stock options to \$0.63 per share. SBCE can vary widely in any given quarter, as it is a function of several factors, such as the number of stock options issued in the period, and the period of amortization of the resultant expense.

Other Expense (Income)

	Q4-11	Q4-10	2011 YTD	2010 YTD	2009 YTD
Oil and natural gas operations:					
Gross over-riding royalty revenues	(516)	(4,433)	(4,881)	(8,596)	-
Operating expenses	4,562	657	5,051	5,169	7,351
Accretion of ARO	877	1,699	3,509	4,092	7,653
	4,923	(2,077)	3,679	665	15,004
Interest income, net	(8,008)	(2,447)	(16,353)	(9,923)	(80,633)
Loss (gain) on foreign exchange	(4,992)	15,223	(28,209)	16,509	150,958
Loss on sale of property	-	-	-	1,074	(1,037)
	<u>(8,077)</u>	<u>10,699</u>	<u>(40,883)</u>	<u>8,325</u>	<u>84,292</u>

Interest income, net - interest income earned on short-term investments is offset by interest expense incurred on a capital lease obligation for office equipment. Interest income was substantially higher in the 2009 period, as NXT had higher levels of cash and restricted cash balances through 2009.

Loss (gain) on foreign exchange - caused by changes in the relative exchange values of the US dollar, Canadian dollar and Colombian peso ("COP"). For example, when the Canadian dollar trades higher relative to the US dollar or COP, cash held in US dollars or COP will decline in value and this decline will be reflected as a foreign exchange loss in the period. NXT normally holds its cash and short-term investments in Canadian dollars to reduce the effect of market volatility; however, we currently are contractually obligated to hold certain restricted cash funds in US dollar instruments to support performance bond commitments in certain foreign countries.

Accretion of asset retirement obligation ("ARO") - ARO reflects the estimated net present value of NXT's net working interest in 8 gross (1.1 net) oil & gas wells in which NXT had a historical participation prior to 2005. The ARO is based upon estimates of the future costs (to be settled in approximately 3 years) to abandon, remediate and reclaim the well sites. Accretion expense represents the ongoing increase in the ARO due to the passage of time.

Liquidity and Capital Resources

NXT's cash and cash equivalents plus short-term investments at the end of Q4-11 was \$1,518,946. This excludes a total of \$74,135 which is classified on the Balance Sheet as restricted cash, and which is required primarily as security for contract performance bonds.

NXT's ability to continue as a going concern will be dependent upon our success in being able to expand the revenue base to a level sufficient to far exceed G&A expenses, and generate net cash flow from operations. Equity financings have been used on a limited basis in recent years to supplement working capital as the Company has changed its strategy to focus its efforts on the international oil and gas exploration markets, particularly in Colombia. A private placement financing of US \$2.2 million was conducted in March 2012 (as further detailed below) to enhance NXT's financial strength as it seeks to expand.

The process of gaining acceptance of NXT's revolutionary technology in the oil & gas exploration industry has been challenging. However, customer success in using SFD® to reduce their exploration time, cost, and risk is growing, and starting to yield repeat business. In 2011 NXT secured two significant new contracts to conduct SFD® survey projects in Colombia and Guatemala (total of US \$4.6 million, of which \$2.9 million was completed in January, 2012 and US \$0.7 million was started in April 2012) and in Argentina (US \$1.65 million for which data interpretation is well underway). In addition, we are awaiting final security clearances and permits to conduct a US \$2.7 million survey contract in South Asia. We project that these survey contracts will all be profitable. Ongoing uncertainty as to the timeline from customer interest, through contract negotiation and actual project kick-off, however, puts strain on planning of capital resources.

The Company has no secured debt (other than a minor capital lease obligation on office equipment) and its net working capital was as follows:

	excluding deferred balances	add deferred balances re survey contracts	total as at December 31, 2011	total as at December 31, 2010
Current assets				
cash and short term investments	\$ 1,518,946	\$ -	\$ 1,518,946	\$ 1,370,234
accounts receivable	122,231	-	122,231	3,071
prepaid expenses and other	43,105	-	43,105	45,941
work-in-progress	-	1,112,210	1,112,210	-
	<u>1,684,282</u>	<u>1,112,210</u>	<u>2,796,492</u>	<u>1,419,246</u>
Current liabilities				
accounts payable and accrued liabilities	1,347,925	-	1,347,925	576,588
current portion of capital lease obligation	8,591	-	8,591	10,684
deferred revenue	-	1,776,496	1,776,496	-
	<u>1,356,516</u>	<u>1,776,496</u>	<u>3,133,012</u>	<u>587,272</u>
Net working capital (deficiency)	<u>327,766</u>	<u>(664,286)</u>	<u>(336,520)</u>	<u>831,974</u>

While the consolidated financial statements reflect a total net working capital deficiency as at December 31, 2011 of \$336,520, as shown above, it is critical to note that this is a result of NXT's method of revenue recognition - revenues and related project costs are deferred until the period in which the survey contract is completed. Deferred revenue (a current liability) of \$1.8 million represents amounts billed and collected to December 31, 2011 that will be recognized in revenue in Q1 and Q2-2012. Similarly, virtually all of the work-in-progress (current asset) of \$1.1 million relates to deferred survey costs that will be recognized in Q1-2012.

Also, deferred revenue represents only the portion of progress billings that were issued to December 31, 2011 for these contracts. Significant additional progress billings of US\$ 2.3 million were issued (and have been collected, net of applicable local withholding taxes) on the Colombia and Argentina contracts in Q1-2012. Additional billings of US \$1.1 million will be issued in 2012 upon completion of the Argentina and Guatemala projects, which is planned to occur by the end of Q2-2012.

The components of the balances recorded as at December 31, 2011 are:	work-in progress	deferred revenues
Colombia	\$ 955,823	\$ 1,673,916
Argentina	106,837	102,580
South Asia and other	49,550	-
	<u>1,112,210</u>	<u>1,776,496</u>

There were no deferred revenues (and no significant work-in-progress) related to contracts in process as at the December 31, 2010 year end.

The increased total of accounts payable and accrued liabilities at the 2011 year end is due to several factors, including (1) survey costs and related sales commissions incurred in Q4-11, and (2) accrued wages and Board of Director fees payable which were not yet paid by December 31, 2011. In Q4-10, NXT implemented a reduction in wages and director fees in order to conserve cash resources. Wages and director fees totaling approximately \$281,000 were paid out in Q1-2012 after completion of the Colombia surveys, and an improvement of financial resources.

The following summarizes NXT's net cash flows for the current quarterly period (Q4-11 as compared to Q4-10) and for the last 3 fiscal years 2011, 2010 and 2009:

Cash flows from (used in):	Q4-11	Q4-10	2011	2010	2009
Operating activities	\$ 422,532	\$ (722,275)	\$ (1,756,515)	\$ (2,692,776)	\$ (2,580,308)
Financing activities	423,835	(2,240)	1,916,481	45,837	42,262
Investing activities	(51,945)	843,809	884,397	(1,062,623)	6,566,126
Net source (use) of cash	794,422	119,294	1,044,363	(3,709,562)	4,028,080
Cash, start of the period	714,524	345,289	464,583	4,174,145	146,065
Cash, end of the period	<u>1,508,946</u>	<u>464,583</u>	<u>1,508,946</u>	<u>464,583</u>	<u>4,174,145</u>

Further information on the net changes in cash, by Operating, Financing, and Investing activities, is as follows:

Operating Activities	Q4-11	Q4-10	2011	2010	2009
net loss for the period	(1,072,560)	(1,276,693)	(3,584,601)	(4,452,428)	(2,405,125)
add back non-cash expense items	96,774	444,512	508,787	746,144	849,180
	(975,786)	(832,181)	(3,075,814)	(3,706,284)	(1,555,945)
decrease (increase) in non-cash working capital balances	1,398,318	109,906	1,319,299	1,013,508	(1,024,363)
net cash from (used in) operating activities	422,532	(722,275)	(1,756,515)	(2,692,776)	(2,580,308)

As shown above, cash balances increased in 2011 by \$1,044,363 to \$1,508,946 at December 31, 2011. The major components of the above noted totals for 2011 are:

Financing Activities

- overall net cash source of \$1,916,481.
- a private placement financing of units (\$1.6 million gross proceeds) in February 2011 resulted in net proceeds to NXT of \$1,487,827.
- \$420,000 was realized in Q4-11 from proceeds on exercise of common share purchase warrants that were issued in February 2011.
- stock option exercise proceeds in 2011 were \$18,900.
- repayment of a capital lease obligation totaled \$10,246.

Investing Activities

- overall net cash source of \$884,397.
- the \$895,651 funds inflow arising from the net redemption of short-term investments was primarily used to fund ongoing operating expenses, and a temporary increase in restricted cash balances in the first half of 2011.
- a cash inflow of \$27,721 arose from a net decrease in 2011 in restricted cash balances which have been issued as security for contract performance bonds. In the Q3-11 period, a total of \$267,000 was released from restricted cash following a delay in the start of the South Asia project.
- \$38,975 was used for minimal purchases of property and equipment.

Subsequent Events - Financing Transactions in 2012

- in March 2012, NXT closed a non-brokered private placement of units (the "Units") of the Company for gross proceeds of US \$2,216,005 (the "Financing"). Each Unit was issued at a price of US \$0.75 and consisted of one common share and one common share purchase warrant (a "Warrant").

Each Warrant entitles the holder thereof to purchase one common share of NXT at an exercise price of US \$1.20 for a term of two years (expiring in March, 2014). NXT has the option to call for acceleration of the expiry (the "Acceleration", subject to a maximum of 50% in the first 6 months after issuance) of the Warrants if it issues a press release advising that its common shares have traded in excess of US \$1.50 for 20 consecutive trading days on the Nasdaq OTCBB. Any Warrants subject to such Acceleration shall expire 30 days after notice.

NXT paid finder's fees totaling US \$121,812 and issued a total of 162,416 finder's warrants (which have the same terms as the Warrants noted above) on this Financing. The Financing was priced in US \$ as it was expected that the majority of investor interest would be with US subscribers.

The Warrants, if they were to be exercised in full before their expiry in March 2014, would yield additional proceeds to NXT of US \$3,740,506.

- pursuant to a separate \$1,600,300 private placement financing which closed in February 2011, NXT had issued a total of 3,200,600 units, which included one common share and one warrant to purchase common share. These warrants, which had an exercise price of \$0.60 per common share, expired on February 16, 2012. A portion of these warrants were exercised in November, 2011 and in February, 2012, with the remainder expiring, as follows:

	# of warrants	exercise proceeds at \$0.60 per share
warrants exercised in November 2011 (Q4-2011)	700,000	\$ 420,000
warrants exercised in February 2012 (Q1-2012)	464,558	278,735
	1,164,558	698,735
warrants expired on February 16, 2012 (Q1-2012)	2,181,362	
total	3,345,920	

- the total net proceeds received by NXT (with the Financing at a rate of approximately Cdn \$0.9991 per US\$) from these transactions in Q1-2012, plus the exercise of a limited number of stock options, was as follows:

	# of warrants issued	# of shares issued	US \$ proceeds to NXT	Cdn \$ proceeds to NXT
gross proceeds from the private placement Financing	2,954,672	2,954,672	\$ 2,216,005	\$ 2,214,011
finders fees incurred	162,416	-	(123,812)	(123,701)
	3,117,088	2,954,672	2,092,193	2,090,310
warrants exercised in February 2012 (at \$0.60 per share)		464,558		278,735
stock options exercised		75,000		47,250
total to date in 2012		3,494,230		2,416,295

Contractual Commitments

As at December 31, 2011, NXT had an office lease commitment expiring October 31, 2012 and requiring minimum monthly lease payments of \$31,588. In March, 2012, this lease was extended for a 2.5 year period through April 30, 2015 at a minimum monthly lease payment of \$22,956 (including estimated operating costs). The estimated minimum annual lease commitment is now as follows:

	for the year ending December 31	total minimum lease payments
	2012	364,093
	2013	289,245
	2014	289,245
	2015	96,415
		<u>1,038,998</u>

NXT currently does not own any aircraft used in its' survey operations, but has in place an agreement, which expired in January 2012, to utilize a minimum annual volume of aircraft charter hours. NXT has met terms of this charter agreement for the year ended December 31, 2011, and has extended the contract for an additional one year term.

Transactions with Related Parties

Officers of the Company subscribed for a total of \$40,000 of the February 2011 private placement financing and US \$10,000 of the March 2012 private placement financing.

NXT retains as legal counsel a law firm of which one of its Directors is a partner. In 2011, NXT incurred legal expenses of \$52,234 (2010 - \$15,219) with this firm, for which a total of \$8,719 is included in accounts payable as at December 31, 2011 (December 31, 2010 - \$8,689).

Additional Disclosures - Outstanding Securities

	as at April 26, 2012	as at December 31, 2011	as at December 31, 2010
Shares issued:			
Common shares	38,251,626	34,757,396	30,801,796
Preferred shares	10,000,000	10,000,000	10,000,000
Common shares reserved for issue re:			
Stock options	2,060,600	2,473,100	2,134,804
Common share purchase warrants (\$0.60 exercise price, expiry date February 16, 2012)	-	2,645,920	-
Common share purchase warrants (US \$1.20 exercise price, expire in March, 2014)	3,117,088	-	-
Total, fully diluted	<u>53,429,314</u>	<u>49,876,416</u>	<u>42,936,600</u>

Critical Accounting Estimates

The preparation of NXT's consolidated financial statements is in accordance with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities including the disclosure of contingent assets and liabilities at the date of the consolidated financial statements as well as the amount of revenues and expenses recorded during the reporting periods. Estimates made related to allowances for doubtful accounts, estimated useful lives of assets, provisions for contingent liabilities, measurement of stock-based compensation expense, valuation of future tax assets, estimates for asset retirement obligations, and the valuation of preferred shares (which may include estimates of the likelihood that the conversion feature of the preferred shares will be achieved in future). The estimates and assumptions used are based on management's best estimate. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the period when determined. Actual results may differ from those estimates.

Changes in the accounting estimates or assumptions could have a significant impact on the Company's reported Consolidated Statement of Loss.

The key elements and assumptions that we have made under these principles and their impact on the amounts reported in the consolidated financial statements remain substantially unchanged from those described in NXT's 2010 audited consolidated financial statements.

Revenue Recognition

Revenue earned on SFD® survey contracts (net of any related foreign sales taxes) is recognized on a completed contract basis. This method of revenue recognition is deemed as appropriate given the complex nature of the end product that is delivered to the client - while the quantity of data acquisition can be measured based on actual line kilometers flown, the acquired data has little value until it is processed, interpreted in detail, and a recommendations report is generated and reviewed with the client's geological & geophysical staff.

All funds received or invoiced in advance of completion of the contract is reflected as unearned revenue and classified as a current liability on our balance sheet. All survey expenditures and obligations related to uncompleted SFD® survey contracts (including directly related sales commissions) are reflected as work-in-progress and classified as a current asset on our balance sheet. Upon completion of the related contract, unearned revenue and the work-in-progress is moved as appropriate to the statement of earnings (loss) as either revenue or survey cost. Survey cost does not include any amortization or depreciation of property and equipment.

Income taxes

NXT applies the asset and liability method of accounting for income taxes. This method recognizes income tax assets and liabilities at the rates when the temporary differences are reversed or realized, based on temporary differences in reported amounts for financial statement and tax purposes. The effect of a change in income tax rates on future income tax assets and future income tax liabilities is recognized in income in the period when the change is enacted. Valuation allowances are provided when necessary to reduce future tax assets to the estimated amount that is more likely than not to be realized.

Stock-based compensation expense

NXT follows the fair value method of accounting for any options which are issued under its stock option plan. Under this method, an estimate of the fair value of the cost of all stock options granted to employees, directors and consultants is calculated using the Black-Scholes option pricing model and charged to income over the vesting period of the option, with a corresponding increase recorded in contributed surplus. Upon exercise of the stock option, the consideration received by the Company, and the related amount previously recorded in contributed surplus, is recorded as an increase in common share capital.

Stock-based compensation expense related to any non-employees is periodically re-measured until their performance period is complete. Changes to the re-measured compensation are recognized in the period of change and amortized over the remaining life of the vesting period in the same manner as the original stock option grant.

Changes in Accounting Policies Including Initial Adoption

There were no changes in accounting policies that affected NXT in any of its last two fiscal years ended December 31, 2010 and 2011.

In 2009, a change occurred in the method of accounting for the vested portion of stock options that were granted to non-employee contractors to the Company. Such stock options, which had a US \$ exercise price, were considered to be "derivative" liabilities, to be adjusted to fair value on a recurring basis. A transitional adjustment was recorded effective January 1, 2009 as follows:

decrease in contributed capital	(108,779)
increase in derivative liabilities related to contractor stock options	41,415
decrease in deficit	67,364

In December 2010, all outstanding stock options were re-priced to Canadian \$, and as such NXT no longer has any derivative liabilities related to stock options.

Risk Factors

NXT is exposed to numerous business related risks, some of which are unique to the nature of its operations. Many of these risks can not be readily controlled.

Future Operations

NXT is still in the early stages of commercializing its SFD® technology. Its ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its SFD® services. Management recognizes that this early commercialization phase can last for several years, and that it can have significant economic dependence on a small number of clients, which can have a material effect on the Company's operating results and financial position.

NXT anticipates that it will be able to generate both net income and cash from operations in future years based on its current business model; however this outcome cannot be predicted with certainty. The Company has an extensive prior history of generating net losses and a shortage of working capital. The Company's consolidated financial statements do not include any adjustments to amounts and classifications of assets and liabilities that might be necessary should NXT be unable to generate sufficient net income and cash from operations in future years in order to continue as a going concern.

International operations

NXT conducts the majority of its operations in foreign countries, some of which it has not operated in before. This exposes NXT to various risk related to stability of political regimes, knowledge of the local customs, duties and other taxes, and the ability to access the relevant local services.

Availability of charter aircraft

NXT currently does not currently own any aircraft, and relies upon the availability of aircraft which is operated under charter hire arrangements. Charter operators provide the aircraft used in SFD® survey operations on an as required basis in exchange for an hourly charter fee (plus fuel and other direct operating costs). NXT is not required to make a capital investment in chartered aircraft, but in order to guarantee aircraft availability and rate certainty, it currently commits to a one year contract, with a minimum number of charter hours. NXT is thus exposed to potential financial penalty in the event that it fails to fulfill the minimum annual charter hours commitment.

Management and staff

NXT's success is currently largely dependent on the performance of a limited group of senior management, Directors, and staff. The loss of the services of any of these persons could have an adverse effect on our business and prospects. There is no assurance that NXT can maintain the services of our complement of management, Directors, staff and other qualified personnel that are required to operate our business.

Reliance on specialized equipment, and the protection of intellectual property

NXT currently has a limited number of SFD® survey sensors which are used in survey data acquisition operations. In addition, there is potential risk that the equipment could become destroyed during operations, become obsolete, or that a third party might claim an interest in our proprietary intellectual property. The costs of legal defence of our rights to the SFD® technology could be very expensive.

Volatility in oil and natural gas commodity prices may affect demand for our services

NXT's customer base is in the oil and natural gas exploration industry, which is exposed to risks of volatility in oil and natural gas commodity prices. As such, demand for our services, and prospective revenues, may become adversely impacted by ongoing declines in oil and natural gas prices. The impact of price changes on our ability to enter into SFD® survey contracts cannot be readily determined, however, in general if commodity prices decline significantly, our opportunity to obtain and execute SFD® survey contracts will also likely decline.

Foreign currency fluctuations

NXT generally bills its revenues in US \$, and as such frequently holds cash in both Canadian and US dollars. At December 31, 2011 we are exposed to foreign exchange fluctuations on approximately \$1,379,000 of US \$ funds. Additionally, most of our operating expenses are incurred in Canadian dollars. We do not currently engage in currency hedging activities which can be used to mitigate this risk.

Interest rate fluctuations

NXT periodically invests excess cash in short-term investments which generally yield fixed interest rates. Accordingly, NXT faces some risk related to volatility in interest rates, as interest income may be adversely affected by any material changes in interest rates.

Related party transactions

NXT may periodically enter into related party transactions with its Officers and Directors. The most significant related party transaction was a "Technical Transfer Agreement" executed on December 31, 2006 between NXT and its CEO, President and Director whereby the NXT issued 10,000,000 convertible preferred shares in exchange for the acquisition of the SFD® technology, for use in hydrocarbon exploration.

All related party transactions have the potential to create conflicts of interest that may undermine the Board of Director's fiduciary responsibility to NXT shareholders. NXT manages this risk of conflict of interest through maintenance of a strong independent Board of Directors. Five of the six current Directors are independent. All transactions between Officers and or Directors of the Company are negotiated on behalf of NXT and voted upon by the disinterested Directors to protect the best interests of all shareholders.

Disclosure Controls, Procedures and Internal Controls over Financial Reporting

The Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") (together, the "Responsible Officers") are responsible for establishing and maintaining disclosure controls and procedures ("DCP"), or causing them to be designed under their supervision, for the Company to provide reasonable assurance that material information relating to the Company is made known to the Responsible Officers by others within the organization, particularly during the period in which the Company's quarterly and year-end financial statements and MD&A are being prepared.

DCP and other procedures are designed to ensure that information required to be disclosed in reports that are filed or submitted is recorded, processed, summarized and reported within the time periods specified by the relevant security authority in either Canada or the United States of America. DCP include controls and procedures designed to ensure that information required to be disclosed in our reports is accumulated and communicated to management, including our Responsible Officers, to allow timely decisions regarding required disclosure.

As of December 31, 2011 an evaluation was carried out under the supervision of, and with the participation of management, including the CEO and the CFO, of the effectiveness of the Company's DCP as defined under the rules adopted by the Canadian securities regulatory authorities and by the US SEC. Through this evaluation the CEO and the CFO concluded that there are material weaknesses in the Company's internal controls over financial reporting that have a direct impact on the Company's DCP:

- Due to the limited number of staff at the Company's Calgary head office, it is not feasible to achieve adequate segregation of incompatible duties. The Company mitigates this deficiency by adding management and Audit Committee review procedures over the areas where inadequate segregation of duties are of the greatest concern;
- The Company does not retain staff with the specialized expertise required to prepare, nor does the Company employ sufficient staff, to adequately review some complex or highly judgmental accounting issues. These complex areas include accounting for income taxes, stock based compensation expense, and other complex matters. The Company mitigates this deficiency by preparing financial statements with their best judgments and estimates of the complex accounting matters and relies on reviews by management, external consultants and the Audit Committee for quality assurance; and
- NXT has a Colombian branch office that processes regional financial transactions, and it is staffed solely by one senior administrative manager. It is not feasible to monitor all of the daily activities of this manager. NXT mitigates this risk by adding administrative and management over-sight procedures at NXT's Calgary head office.

Notwithstanding the Company's efforts to mitigate the risks associated with the above mentioned deficiencies, the CEO and CFO concluded that the Company's internal controls over financial reporting are not effective and as a result its DCP are not effective as at December 31, 2011. The Company reached this conclusion based upon their assessment that there is more than a remote likelihood that its internal controls over financial reporting will not prevent or detect material misstatements if they should exist in our financial statements.

Additional Information

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>.