CAP 2016 029 'New Zero' Energy Status Update - Appendix C

2017-2018 - Summary of TCDSB Energy Savings Initiatives to Date

Initiative Type	**Description of Work** (Scope of Work and Rationale for the work)	**Number of Projects-Elementary** (2017-2018)	**Number of Projects-Secondary** 2017-2018)	**Total Capital Investment for These Projects**	**Estimated 'Pay-Back' Period** (Years)	**Projected Energy Savings** (ekWh)
LED lighting retrofits	Replacement of all existing fluorescent lights (T12 and T8) with LED bulbs to reduce electricity cost. LED build gives more light per unit of electrcial energy (Watt) and has a longer life compared to florescent bulbs.Retrofitting florescent bulbs with LED bulbs help the board to reduce the electricity cost and the cost of maintainace	7	6	$1,550,000	4	387,312
Boiler Replacement/BAS improvements	Replace old boilers with energy efficient boilers and replace outdated BAS /controls	12	2	$8,870,000	6	1,985,163
Buidling doors/Windows	Replace doors/windows to reduce air infteration and heat loss	9	1	$1,970,790	Over 10 yrs	732,556
Building Roof replacement	Full roof replacement (reduce heat loss)	11	4	$7,150,000	Over 10 yrs	2,306,124
Voltage Harmonizer	Volatge Harmonizers regulate incoming high volatge to reduce energy use in schools		5	$375,185	4	529,692

* Payback period for boilers/BAS systems is based on the incremental cost of energy and labour savings resuting from replacing end of life equipment with more energy efficent equipment