



**POLITECNICO
DI TORINO**

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Greetings from Politecnico di Torino



Indice dei contenuti

Due recenti progetti importanti per il mio Ateneo

Due obiettivi che la Rete dovrebbe raggiungere

Due obiettivi generali e comuni a tutte le Università aderenti alla Rete

Mirafiori



Lingotto



**Cittadella
Politecnica**

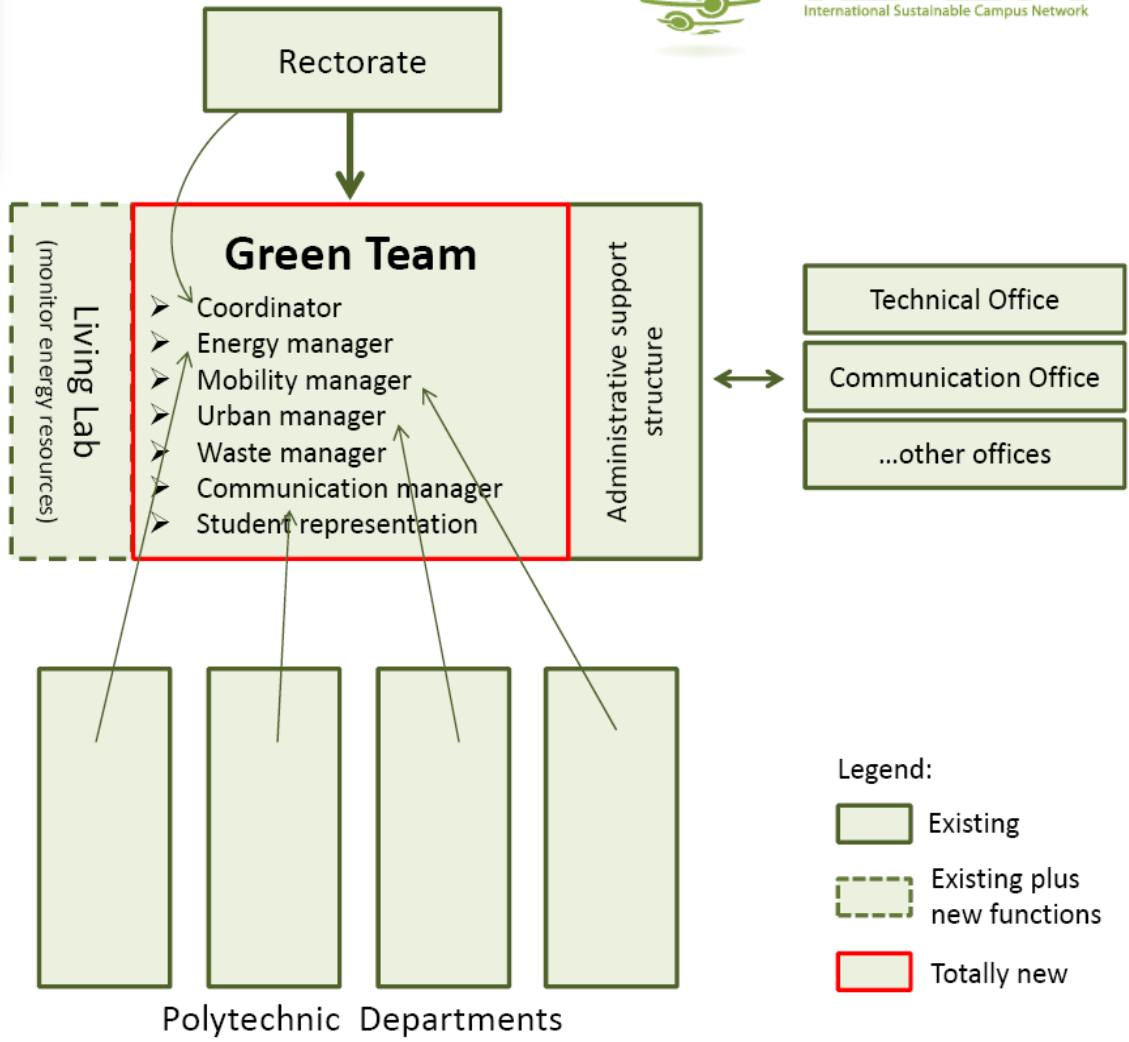
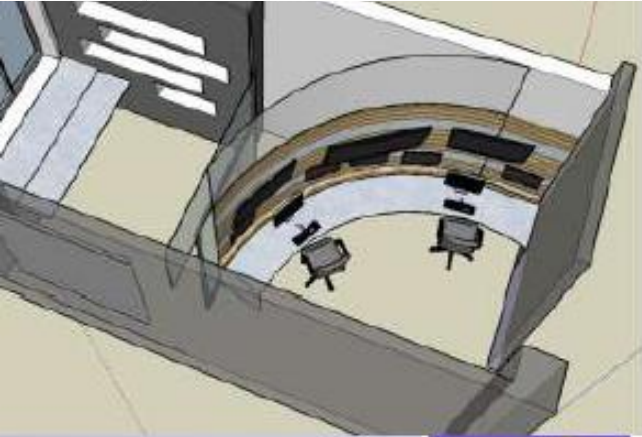
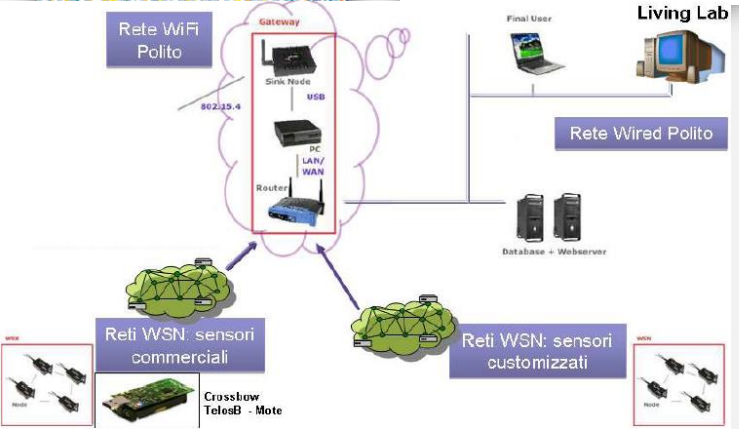


**Corso Duca
degli Abruzzi**





Valentino






- Legend:
- Existing
 - Existing plus new functions
 - Totally new

Progetto Politoward



STARTS WITH YOU

Learn More
about the politoward project



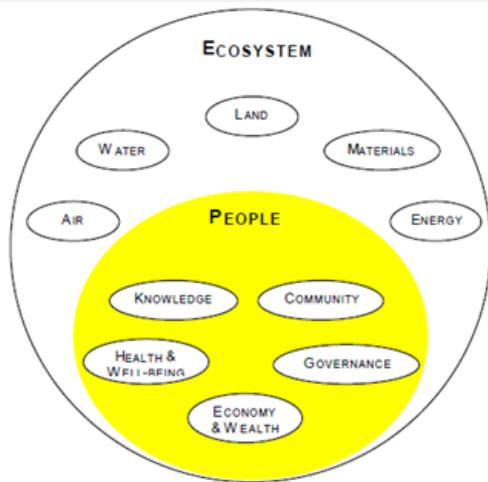
The image is a promotional poster for a Summer School. It features a scenic background of a misty lake with mountains in the distance. A person in a red jacket stands on a log in the foreground. The text is overlaid on the image. In the top right corner, there is a white box with the text 'Summer School, Torino, 14-18 Sept. 2015'. In the top left corner, there is a blue shield logo with a graduation cap. The main text reads 'Sustainability in university campuses' in a small font, followed by 'STARTS WITH YOU' in large, bold, white letters. Below that, it says 'Learn More' with a red underline, and 'about the politoward project' in a smaller, italicized font.

We aim at fostering universities' sustainability by connecting researches on interdisciplinary campus-based topics.



Politoward.org

As centres of educational and research excellence, campuses are in a unique position to offer their built environment as “living labs” for the experimental application of measures to increase energy savings, boost renewable energy production, curb water usage, reduce waste generation, curtail CO2 emissions, divert commuters from energy intense modes of transport, improve urban planning, raise the share of local food procurement, and many other impact areas.



The idea is to see a university campus no longer as a mere educational establishment, but as a laboratory for promoting innovation and capitalising on the social, economic and environmental value offered by an on-going transformation. “Laboratory” means that eventually we, as campus users and researchers, can take advantage of gathering together, listen to those who are looking after same problems and methods to solve them, and **share energies and ideas to improve our communities and its resilience.**

1) METRICHE COMUNI E CONDIVISE

Principle 3												
Principle 2												
Principle 1												
Politecnico di Torino "Dimensions"	Topics	Goal and initiatives				Results						
		Priority topic	Objective/targets	Key Initiatives	2013	2014	2015 expected	2016 expected				
PF	EB	Inst	Politecnico di Torino "Dimensions"	Resource use	Use of "green electricity"	Purchasing of RECS	100%	100%	100%	100%		
					Production of renewable energy (PV plants)	Increase of electricity production by PV plants	30 MWh	30 MWh	30 MWh	300 MWh		
					Reduction of electricity consumption	Automated Switch off Computers ("PollSave project")	... pc notte/max pc giorno (in %)	... pc notte/max pc giorno (in %)	... pc notte/max pc giorno (in %)	... pc notte/max pc giorno (in %)		
					Improvement of cooling system	Substitution of single plants with central air-conditioning system	Sostituzione di alcuni impianti con altri dotati di performance superiori	Inizio dei lavori per la realizzazione di una centrale frigo al Valentino	Fine lavori al Valentino e inizio per la realizzazione di una impia into unico in sede	Conclusioni dei lavori di realizzazione della centrale frigo in sede centrale		
					Lighting: improvement of the system	Substitution of old lamps with LED	% sul totale	% sul totale	% sul totale	% sul totale		
					Heating	...	...% dei volumi telericadati sul totale	...% dei volumi telericadati sul totale	...% dei volumi telericadati sul totale	...% dei volumi telericadati sul totale
					Water dispenser (installed by ...)	...	... Litri erogati	250 Litri (a acqua gasata)	... Litri erogati	... Litri erogati
					Light and holidays	...	...% notturni/ totali	...% notturni/ totali	...% notturni/ totali	...% notturni/ totali
					Monitor resource use	...	...	...	Automatizzazione dei report sui consumi elettrici	Monitoraggio consumi per dipartimento e automa fazzazione totale dei report
					Quantity of recycled paper consumed/on total	...	...%	65% (solo di pendente)	...%	...%
PF	PW	Mar	Politecnico di Torino "Dimensions"	Purchased materials	Save paper	Paperless services and recovery initiatives	Dal 2009 servizi online per didattica, esami e altro...	Iniziativa studentesche - contatto con copisterie per riutilizzo e installazione punti di raccolta appositi	Accordo ufficiale con copisterie per riutilizzo			
					Use of Green products (APE Protocols)	Purchase of green goods (Consign Agreement)	Carta fotocopie: 98% Carta stampati: 100% Att. Informatiche: 43%	In progress	Carta fotocopie: 98% Carta stampati: 100% Att. Informatiche: 50%	Carta fotocopie: 100% Carta stampati: 100% Att. Informatiche: 60%		
					Use of Green products (APE Protocols)	Purchase of ecological products for cleaning	296 litri utilizzati 201,557 mq puliti	In progress	300 litri /mq superficie??	300 litri /mq superficie??		
					Waste, recycling, local emission and non-compliance							
Transversal	PF	Co	Politecnico di Torino "Dimensions"	Waste	Improvement of Recycling rate	Creation of 8 new ecological islands (with new bins) improved signals and labelling	-	Installazione di cestini e segnaletica	...num bidoni smaltiti/volume	...num bidoni smaltiti/volume		
					Improvement of Special waste's collection	Internal collection point for special waste	... Ton (RAEE, Ferro, Legname, Foglie secche, Neon)	... Ton	... Ton	... Ton		
					Improvement of collection waste	Introduction of collection system "door to door" in collaboration with AMIAT	Sede centrale	Sede centrale	Ampliamento anche a Mirafiori	Ampliamento anche al Valentino		
Transversal	EB	Soc	Politecnico di Torino "Dimensions"	Building design aspects	Building design aspects							
					Building structures	Improvement of insulation/reduction of energy demand	Replacement of all windows frame antiquated with new typologies and installation of radiation shields	mq	1037 mq (windows) 562 mq (shields)	732 mq (windows) 432 mq (shields)	...mq (windows) ...mq (shields)	
						Reduction of primary energy consumption	Monitoring of resource use in each branch/building	...kWh/mq	...kWh/mq	...kWh/mq	...kWh/mq	

52 Key initiatives
11 different topics

PER GIUNGERE A TARGETS E OBIETTIVI CHIARI DA RAGGIUNGERE

Topics	Goal and initiatives		Results			
Priority topic	Goal/target	Key initiative	2013	2014	2015 expected	2016 expected
Energy	Reduction in primary energy consumption for heating	Heat supply from IREN district heating	79,5 %	80,9 %	Settle to 2014 value or higher	Settle to 2015 value or higher
Building structures	Improvement of insulation/reduction of energy demand	Replacement of all windows frame antiquated with new typologies and installation of radiation shields	2,5 % (windows) 195 m ² (shields)	6,6 % (windows) 7575 m ² (shields)	20,5 % (windows) 2.264 m ² (shields)	28,5 % (windows) 3.000 m ² (shields)
Mobility (cycling)	Encourage Bicycle use	Construction of new bike-racks, closed and possibly covered (3 of them), for bicycles.	163 bike racks	233 bike racks	317 – use: 80%-85%	320 – use: 85%-90%
Workplace safety	Enhance the safety in campus	Endowment of semi-automatic defibrillators	1	1	7	7
Campus engagement	Provide quality services for students and employees, educate the community	Encourage student's associations (number/team)	16 / 29	18 / 29	18 / 30	18 / 32

2) **Sviluppare forme concrete di collaborazione e di apprendimento (*Lessons learned*) su temi specifici in cui le singole università associate sono "più avanti", iniziando magari da quelle più vicine geograficamente: es. il green product procurement di UniTO; le iniziative di farming e orti urbani gestiti da studenti viste a Milano, l'arte moderna come strumento di comunicazione a Venezia, ecc.**



Due azioni concrete :

- A. Istituire in ogni ateneo un “ufficio sostenibilità”, con almeno una persona “preparata” sul tema a cui sia affidato il compito di riunire tutte le iniziative già attive nell’università sotto lo stesso “cappello”.**

- B. Adottare nuovi e più incisivi approcci ‘pedagogici’ nei corsi curriculari, rivolti all’apprendimento dei principi e obiettivi della sostenibilità, ad es. nei corsi di ingegneria energetica / architettura / sociologia, invitare gli studenti a studiare un edificio dell’università come caso studio e vedere come fare a ridurre i consumi (gas / waste / water / elettrici) .**



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Grazie per l'attenzione

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