Home green home



FOUR WAYS TO BE GREEN!

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Introduction



The idea of this book has born to pass on the reader a very important message regarding the environmental thematics: without much effort and,why not,

having fun, every one of us can be a little GREEN!

We are two fellows from Padua called GBB, which stands for Green Bad Boys, lovely nickname given to us by our coordinator.

We like marketing, computers and ecology. In the early september Home S.R.L., an important company for home furnishings, Iso14001 certified, contacted us for an ambitious project: explaining the Green world in a"smart" way, through an introduction of corporations and companies that have been manufacturing goods and services in a GREEN way for many years.

The offer excited us right from the beginning, so we dove into this amazing project. In fact we decided to delve into the depths realities close by which are already applying green policies, thus showing to anyone interested in these themes that all you need is willpower and some effort, to live, to work,

to produce and to educate in a green way. stay green stay smart

WE INHERIT OUR LAND FROM OUR ANCESTORS,

WE BORROW IT FROM OUR SONS.

(ANCIENT NAVAJO SAYING)



A BETTER WORLD IS A DREAM THAT REALIZES AS EVERY ONE OF US DECIDES TO IMPROVE HIMSELF

(MAHATMA GANDHI)

In collaboration with:



DNV - GL

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HOME CUCINE SRL

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UNIVERSITA' DI PADOVA UNIVERSITÀ **DEGLI STUDI** DI PADOVA

WEBSITE



MACCAN SRL

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COMUNE CISON DI VALMARINO

WEBSITE



The Eco-Ethical Company

GRUPPO SAVIOLA

WEBSITE

Preface

Interviewing Zeno Beltrami

One of the most important endorser corporation is DNV-G. With more than 70.000 certificates released worldwide, its name stands for effort in security, quality and care toward the environment. has been Chosen partner in certifications for years by great world known brands just like by small to medium companies.

Through the certification services, tests, assessment and training, DNV-GL supports organizations' performances, their clients' products, staff, infrastructure and supply chain. The services they mainly provide are:

- system management certification- ISO 9001-14001 18001
- Supply chain management- face the riskin every connection, from the rawmaterial to the finished product
- product certification granting more sustainable goods and their access to the global market
- Test- granting goods in compliance with regulations and guidelines
- Staff certification- give value to individual skills
- Training- for requests in quality, safety, respect for theenvironment and corporate responsibiliy.



We have had the chance to interview Zeno Beltrami, responsible for the DNV-GL products. Dr. Beltrami has been taking care of environmental management and eco sustainability for 15 years.

-WHAT'S THE IMPORTANCE OF SUSTAINABILITY IN INDUSTRIAL PROCESSES?

Sustainability is a matter of evergrowing relevance. To this date the extimated value of a company can t ignore this aspect, you can t settle for a simple economical-financial appraisal, especially in the middle-to-long therm. The economical-financial appraisal can have distorsions, but the market needs warrantries over the constant business and sustainability. neither the analists can ignore the social and environmental components of their ranking assessment.

-WHAT ABOUT THE ONES CLOSELY ATTACHED TO ECOLOGY?

Ecology too has an evergrowing relevance: companies know that the world has a limited amount of resources.themes like climate change and threat to biodiversity are connected to a comapany's everyday life more and more often. Some researches we conducted say that, mostly from emerging countries,

the request to monitor a company's ecological component both in management and in manifacturing is growing. We belive that this needs to be supported both from the political and strategical aspect and from businessmen and top management.

-Sustainability and ecology: how and how much does the end consumer and the market like it?

the market and the consumer are increasingly more sensible to such themes. this happens because communication and critical information(once disclosed) are for everyone to see. The average man is getting more competent thus making some base elements seemingly abstract more understandable (climate change for instance). This is forcing some social pressure towards corporations. the chain of value between consumer, supplier and manifacturer is being influenced by ecology and sustainability more by the day.

-WHCIH ACTUAL BENEFITS DOES A COMPANY RE-CEIVES FROM CERTIFICATION?

Certification is a form of communication, it confirms that some rule has been respected and kept according to a standard made by a third corporation.Product certification guarantees that some requirement of a standard for that goods has been respected; the system certification guarantees that some expected performances are mantained in time. Basically the benefits are widespread in environmental and workplace safety certification. Some changes to a wastedisposal process can lead to lower thequantity and quality of wases, thus improving cost efficiency. un certo processo può portare alla diminuzio

-What actual benefits does the consumer derive from certification?

Certification by itself presents an emotional benefit towards the consumer, induced by the presence of a respected corporation which followed and verified a certain product's features. The economical benefits,instead, are theresults of the reliability and planing of the product which, if tested and under certain regulations, can be defined better than others which didn t follow the same process.

Regarding the achievement of environmental certification which are the differences between great companies and PMI?

Historically environmental certification begun with great companies. A recent international investigation showed that environmental certification, for instance in chemical field, has been sought to handle important and critical situations. This is due to politcal and social pressures regarding the compatibility of a company's presence in the area. Thus causing a chain reaction in their manifacturing's organizational chart, inducing their suppliers to certify themselves, preventing provisions and productions inconstincencies.

-Can environmental certification make a difference in a market dominated by price fighting?

This is a delicate topic, for the syllogism: low price means bad pollution control might be right. We saw that companies that properly perceived certification, especially environmental certification, managed to be more competitive and to lower their costs. The link between pollution control and investments, especially when innovating, prove that when companies spend in this sector they become more competitive and lower their production or shipment costs. The time has come, given the planet-s limited resources, to perceive these factors not as risks but as on opportunity to be more competitive.

-Are there any thematic that might become pivotal in the future?

Surely environmental performances appraises . There are a few elements which have already spread to people, like carbon and water footprint. in wider terms, the main topic will be a company-s proficiency to extimate their own product-s and processes- environmental performance.the measurement and communication of such extimations will become central so the ones concerned will receive the information and the concept of transparency will finally find its own claim. Another topic will be energy efficiency.Nations with bigger issues finding enery resources know that, without an energy efficiency politic, you cant achieve any ancouraging result on the consumer-s side. Renewable energy and energy shipping politics won t do any good if you can t make a decent effort in efficiency.

DNV.GL





CHAPTER 1

Living green



Home green Home Davide Dainese Alberto Mazzucato

Section 1

Separate collection and recycling in Italy



What does "waste" mean?

Waste means any kind of material, object or product which arrives to the end of its use for whoever has it decided to get rid of it. According to its the waste can be classified as urban or special waste. Moreover, according to the danger it poses to a human being and nature, they are divided between dangerous and not dangerous.

In Italy we are both trying to reduce the amount of wastes produced, we managed to lower from 32.479 per

1000 tons (2010) to 31.386 per 1000 tons (2011), and to raise the amount of recyled wastes. So, we notice an ever more solid reduction of dumped wastes. We

move from 15.538 per 1000 tons from 2009 to 15.015 per 1000 tons of 2010 to 13.206 per 1000 tons of 2011.

With regards to recycled volume we move from 6.042 per 1000 tons of 2009 to 7.149 per 1000 tons of 2011. So we have a solid and ever growing trend to improve.

What can be recycled?

Glass

Gathering and recycling glass prevents raw material consumption. In fact 100 Kgs of shards give 100 Kgs of new product. on theother hand it requires 120 Kgs of raw materials to have the same result. Recycling glass you spare 20% of energy (Oil) and reduce atmospherical pollution caused by the manifacturing process.

Paper

The tons of paper recycled through collection in the last 8 years are as big as 120 Dumps. to produce 1 ton of paper, using raw material, it requires 15 trees, 440.000 liters of water and 7.600 KW/h of power. Recycling paper requires 1.800 liters of water, 2.700 KW/h of power and no tree needs to be cut in the process.

Organic

Kitchen scraps, the so called organic wastes, can become fertilizer for floricolture or agricolture and help producing methane.

Plastic

recycling plastic you get more useful plastic. Textile: with 20 PET bottles (a kind of plastic) you can produce a blanket of pile. Construction: PVC (another kind of plastic) can become tubes and pipes for water drainage. Packing: from recycled PET you can get cleaning bins,caps, garbage bag-s films and other films. Urban furniture: 45 plastic bowl and a few meters of LDPE film you can get a bench.

Metals

Metals are easily recycled. Recycling aluminum (tins for instance) allows to save 95% of manufacturing power which would be needed using raw material. In Italy 48% of aluminum comes from recycling and saves 2.5 tons of Oil.

Bulky and dangerous

Old furniture and electrical appliances that don t work anymore, are wastes that, due to their size, need to be brought to the collection center reserved for citizens, where they are disassembled so most of their components, like wood, metal and plastic, can be recycled. Although there is an uneven spread throughout the local regions, in Italy the state of recycling is improving.

Regione	Popolazione	2007	2008	2009	2010	2011	2012	
Kegione	2012	(kg/abitante* anno)						
Piemonte	4.357.663	516	508	505	505	495	465	
Valle d'Aosta	126.620	601	608	621	623	618	605	
Lombardia	9.700.881	512	515	501	500	497	477	
Trentino Alto Adige	1.029.585	486	496	501	491	507	491	
Veneto	4.853.657	491	494	483	488	475	456	
Friuli Venezia Giulia	1.217.780	506	497	479	494	472	452	
Liguria	1.567.339	610	612	605	613	612	586	
Emilia Romagna	4.341.240	673	680	666	677	672	637	
Nord	27.194.765	539	541	530	533	527	503	
Toscana	3.667.780	694	686	663	670	646	614	
Umbria	883.215	639	613	590	597	573	553	
Marche	1.540.688	564	551	537	535	533	520	
Lazio	5.500.022	604	594	587	599	603	582	
Centro	11.591.705	630	619	604	613	605	582	
Abruzzo	1.306.416	527	524	514	507	506	480	
Molise	313.145	404	420	426	413	423	404	
Campania	5.764.424	491	468	467	478	458	443	
Puglia	4.050.072	527	523	527	525	517	489	
Basilicata	577.562	414	386	382	377	381	371	
Calabria	1.958.418	470	459	470	468	458	442	
Sicilia	4.999.854	536	526	516	517	516	485	
Sardegna	1.637.846	519	507	501	492	485	456	
Sud	20.607.737	508	496	493	495	486	463	
Italia	59.394.207	546	541	532	536	528	504	

TABLE 1 wastes production per persone per region, 2007-2012

Analyzing this data you can see a connection between the production of urban waste sand socio economical markers, mostly with Gross National Product and family consumptions; the higher are such markers, the more wastes they produce.

The decline in Wastes production in recent years can be attributed to these two latter factors and to the ongoing economical crisis. Other factors that might have contributed in lowering wastes production are:

- spreading out of house gathering services and/or precise taxes for waste disposal, which also reduce disposal of wastes in the wrong bin
- reducing wastes at their source, following specific prevention measures issued at a regional or sub-regional level

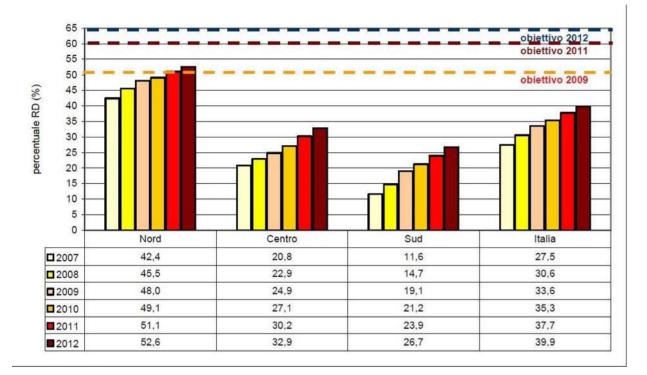
Although improving, Italy is far from reaching its goals in recyling and collection.

The legislative decree 152/2006 and the law from 12/27/2006 n. 296 stated these goals for collection

- at least 35% by 31 December 2006
- at least 40% by 31 December 2007
- at least 45% by 31 December 2008
- at least 50% by 31 December 2009
- at least 60% by 31 December 2011
- at least 65% by 31 December 2012

This is the existing situation:

Table2-waste collection trend 2007-2012



There is a growing trend, but still not high enough to reach the goals.

Every zone is late, although there is a severe gap between north and south with almost 20 points of separation.

Moreover there the collection trend has slow down.

There is a meager 395 tons rise between 2010 and 2011, when in 2009 there was a 676 rise and 844 the year before. A notable contribution in the percentile gain for collection, between 2010 and 2011, is due to an overall strong decrease in urban wastes.

The situations dire, especially in the center-southern part, where there are still many problems. In the North side there is a better state, but still not enough for the goals.



SECTION 2

RECYCLING AND COLLECTION IN VENETO



REGIONE DELVENETO

Veneto is an area of excellence from the recycling and collection point of view.

Let's see the individual cities:

Table 3- Urban wastes per city 2011

Provincia	Popolazione	Produzione Totale	Raccolta Indifferenziata	Raccolta Differenziata	Ingombranti a Smaltimento
				(%)*	(%)*
VERONA	900.542	449.853,90	160.623,78	281.828,76	7,401,36
	See 1		35,71	62,65	1,65
VICENZA	859.205	354.624,67	122.950.58	218.385,12	13.288.97
			34,67	61,58	3,73
BELLUNO	210.001	92,523,36	28.044,01	62.467,30	2.012.06
20100000.	20150	57 M2-	30,31	67,52	2,17
TREVISO	\$76.790	324.300,68	76.924,47	247.120,81	255,40
S			23,72	76,20	0,05
VENEZIA	846.962	509.823,86	246.571,82	255.262,76	7.989,29
- 306 C 11		-	48,36	50,07	1,57
PADOVA	921.361	445.011,42	168.451,04	264.786,44	11.773,94
			37,85	59,50	2,63
ROVIGO	242.349	129.263,27	42.914,33	81.939,47	4.409,47
a serve			33,20	63,39	3,41
VENETO	4.857.210	2.305.401,17	846.480,02	1.411.790,66	47.136,49

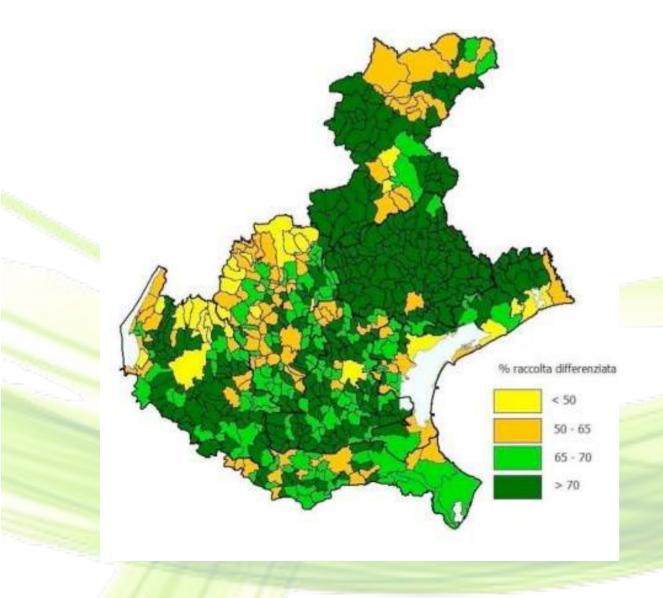
Table 4- Urban wastes per person per city 2011

Provincia	Popolazione	Produzione	Raccolta Indifferenziata	Raccolta Differenziata	Ingombranti a Smaltimento
VERONA	900.542	499,54	178,36	312.95	8,22
VICENZA	\$59.205	412,74	143,10	254,17	15,47
BELLUNO	210.001	440,59	133,54	297,46	9,58
TREVISO	\$76.790	369,87	\$7,73	281,65	0,29
VENEZIA	846.962	601,94	291,13	301,39	9,43
PADOVA	921,361	482,99	182,83	287,39	12,78
ROVKIO	242.349	533,38	177,08	338.11	18,19
VENETO	4.857.210	474,63	174,27	290,66	9,70

How did they do that?

Regional laws in this field set a tax relief for those district councils that take the best efforts in collection. for instance,any district that reach 50% or more in collection pays an ecotax for wastes disposal of 7,75Ä per ton, while districts that couldn t get to such a collection rate have to pay 22,82 per ton.

table 5- collection rate per district



HOME HOME

Comuni Ricicloni (ReCyclon District)



Concerning recycling and environmental sustainability, in waste cycling has been active an important initiative by "Legambiente" called "Comuni Ricicloni"

What is a "Comune Riciclone" ?

Born in 1994, it is a solid date joined by an ever growing number of districts which understand that Legambiente's initiative is an important time for testing and communicating the efforts pro funded to start and consolidate the collection, and from a more generic point of view an integrated system of collection management.

Legambiente's initiative, sponsored by the Ministry of Environment, crowns local communities, managements and citizens who achieved the best results in wastes management: collection towards recycling, but also acquisition of goods and services that prize the materials gathered through separate collection.

Finding a way to appraise these meaningful experiences of proper management within their own complexity, beside the usual standards that declare the separated collection rate the defining factor for the ranking, has also been introduced an index of urban wastes disposal that rated the management in its many aspects. Three are the classes participating for a prize: best separate collection (defined through the score achieved in the index management) higher rate for total separate collection (assembled by the single material collection)maggior and best separate collection of the single collected items.

the reward distribution proceeds according to demographic classes of Towns and to macro-geographical zones: northern, central and southern.

There is also a special prize for the best popularization program in domestic compost, another in gathering and recycling wood and a special prize - A Hundred of these Unions- will be given to the best separate collection in a union level. At last the jury will give special prizes according to its own discretion.

In Rome, with the ministry of environment in office, will be held the closing event of "comuni ricicloni" that assigns the prizes and rewards during a national mediatic event. The celebration will hold a conference with all the main wastes and products institutional officies. The jury for the "comuni ricicloni" is led by Legambiente's delegates, ANCI, Fisse Assoambiente,

FederAmbiente,CONAI,COMIECO,COREVE,CIAL,COREPLA, RILEGNO,Italian compost union, RICREA, RAEE Coordination Center and Assobioblastiche.

Comune	Prov	Abitanti	Indice	RD	PC RU	
PONTE NELLE ALPI	BL	8.485	80.49	85.00	0.84	
BORSO DEL GRAPPA	TV	6.020	79.80	85.00	0.81	
VATTARO	TN	1.244	78,14	81.49	0.87	
BOSENTINO	TN	864	77.62	80.90	0.84	
SAN GREGORIO NELLE ALPI	BL	1.612	77.21	79.76	0.73	
ASOLO	TV	9.065	76.86	85.00	0.77	
ALLES ALLESTING		0.000	70.00	70.04	0.04	

SANTA GIUSTINA

OVARO

MASER

CAPRIANA

6.806

1.982

5.088

688

UD

TV

TN

76.86

76.83

76.52

76.48

78.01

81.07

85.00

75.57

0.81

0.79

0.86

0.70

SECTION 4

Case study: the town of Cison di Valmarino



Cison di Valmarino (Cison in Veneto) is an italian town counting 2739 residents near Treviso in Veneto. It has been selected for the club "the most beautiful hamlets of Italy". The Mayor in charge is Cristina Pin.

Located towards the end of Valmareno (also called Valsana) the vally that goes from Vittorio Veneto to Follina following the Soligo river.



Ancient political and municipal center of Valmarino Shire, The hamlet of Cison is supervised by the Brandolini Caslte, called Castrum Costae during the middle-age and become today a luxury hotel called Castlbrando. The fortified location of Caminese Age (XII century) was improved by the Brandolini Count

adding a Renessaince wing and rising the outer bastions and walls. Antonio Maria Brandolini, died in 1530, wanted the elegant facade of a Venetan patrician household, separated by double mullioned windows, and the placing for the fountain Park.

The most appealing part for a tourist is the old town, the harmony of Roma square strikes first, where palazzo Barbi appears, once a veneta villa now seat of the town hall, and the Loggia, built in the XVIIth century to host a tribunal, and now Theatre. The Brandoline Cantine are a proper example of historical building rescue.

The achpriest chuch of Santa Maria Assunta is a jewel of the XVIIth century (consecrated in 1746) with a double facade: the main entrance, facing west, is

decorated with three statues of the XVIIIth century by Marco Casagrande, representing Faith, Hope, and Charity; the east one faces Roma squadre and has a statue of the patron, San Giovanni Battista, in the center, while at its sides, as two pairs,Prudence with Justice, and Temperance with Fortitude. the inside with a central nave holds, on the central wall behind the altar, L'assunzione della Vergine by Egidio Dall?Oglio (1753)and a valuable pipe organ by Gaetano Callido from 1779.The altar is adorned with beautiful sculpted angels, paintings from the XVIIIth century by a Piazzetta scholar, just like, outside the church, the others Palazzi Veneti that embellish the hamlet. Please note that, in the old town, all the shutters are wither red or brown: the red is called "Rosso Brandolini". Please also note that, at night, following the suffused lightning with the pacer, the poetry of Calata Street, with a drywall painting and the trail that follows an ancient Imperial Main Road, the Claudia Augusta Altinate.

Why Cison di Valmarino is a green town?

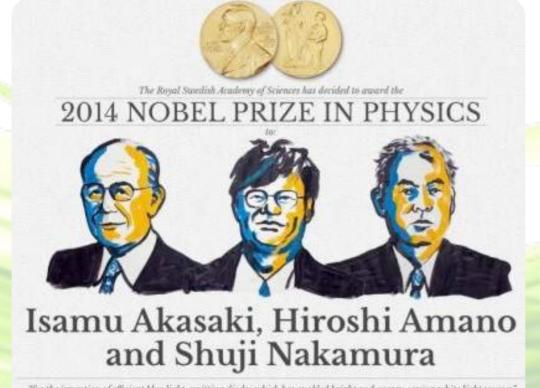
Cison di Valamarino, in recent years, aimed to recover both the urban landscape and the surrounding green.Investing in historical buildings, it prized the edifices making Cison one of the best hamlet of Italy.

Concerning woods and trails, thanks to volunteers and associations and to municipal coordination, the landscape has been saved almost perfectly, making it enjoyable and taken in sights by families and tourists. The town has also waged important resources towards energy efficiency. With a cautious investment program it managed to substantially improve .

An example has been the whole substitution of public lightning, from incandescence to the more efficient LED lightning.

What's a LED?

"For the invention of efficient diods that emit blue light, that allowed the development of white light sources and energentically economic".With this motivation the Royal Swedish Academy of Sciences gave the Nobel prize for phisic 2014 to Isa?mu Akasaki, from Mejo University and from Nagoya University, and Shiji Nakamura, from University of California. santa Barbara.

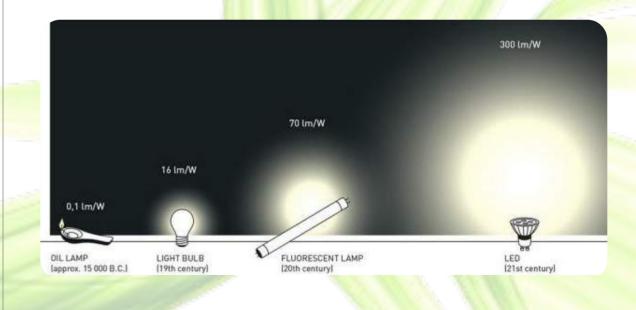


"for the invention of efficient blue light-emitting diodes which has enabled bright and energy-saving white light sources"

POWER SAVING with LED lightning.

LED lamps, developed between 1989 ad 1993, beside being more efficient than the old incandescence bulbs are more efficient than Alogen and fluorescence.

In fact, Leds can deliver light without wasting power in heat emissions differently from other devices, thus optimizing the energy consumption without wasting the heat. Using the same amount of energy a LED lamp produces 4 times more light than a fluorescence bulb, 20 times an incandescence one. The motivation o fthe Swedish Academy qutoes the recent record for a led lamp which arrived at a 300 lumen per watt (lm/w) while a fluorescence arrive to 70 lm/m and indcandescence 16 lm/W.



In conclusion Cison di Valmarino peaked at 80% of separate collection and reduced down to 56.3 kg per person the non recyclable wastes thanks to an efficient door to door gathering system. Moreover it placed into the old town many ashtrays, and cuorious plates with shocking quotes all over the hamlet.

> LA GRANDEZZA DELLA VITA STA NELLA GRANDEZZA DEL SOGNO IN CUI SI E' DECISO DI CREDERE.

> > MARTIN LUTHER KING

Cir

CHAPTER 2

Working green







Home green Home Davide Dainese Alberto Mazzucato

SECTION 21

ISO and certification



International Organization for Standardization is the leading global organization for the definition of technical standards . Founded in 1947, ISO has its headquarters in Geneva, Switzerland and its members are 165 national organizations for standardization.

Which benefits derive from standardization?

For business

International Standards are strategic tools and guidelines to help companies tackle some of the most demanding challenges of modern business. They ensure that business operations are as efficient as possible, increase productivity and help companies access new markets.

Benefits include:

• Cost savings - International Standards help optimise operations and therefore improve the bottom line

• Enhanced customer satisfaction - International Standards help improve quality, enhance customer satisfaction and increase sales

•Access to new markets - International Standards help prevent trade barriers and open up global markets

•Environmental benefits - International Standards help reduce negative impacts on the environment

For Society

ISO has over 19500 standards touching almost all aspects of daily life.

When products and services conform to International Standards consumers can have confidence that they are safe, reliable and of good quality.

International Standards on air, water and soil quality, on emissions of gases and radiation and environmental aspects of products contribute to efforts to preserve the environment and the health of citizens.

For government

ISO standards draw on international expertise and experience and are therefore a vital resource for governments when developing public policy.

By integrating ISO standards into national regulation, governments help to ensure that requirements for imports and exports are the same the world over, therefore facilitating the movement of goods, services and technologies from country to country. The ISO 14000 family addresses various aspects of environmental management. It provides practical tools for companies and organizations looking to identify and control their environmental impact and constantly improve their environmental performance. ISO 14001:2004 and ISO 14004:2004 focus on environmental management systems. The other standards in the family focus on specific environmental aspects such as life cycle analysis, communication and auditing.

ISO 14001:2004 sets out the criteria for an environmental management system and can be certified to. It does not state requirements for environmental performance, but maps out a framework that a company or organization can follow to set up an effective environmental management system. It can be used by any organization regardless of its activity or sector.

The benefits of using ISO 14001:2004 can include:

- Reduced cost of waste management
- Savings in consumption of energy and materials
- Lower distribution costs
- Improved corporate image among regulators, customers and the public

Small and medium sized enterprises (SMEs) also benefit from ISO 14001:2004. However, implementing an environmental management system in SMEs can be challenging but that can give substantial results in environmental management.

ISO 9000 - Quality management

The ISO 9000 family addresses various aspects of quality management and contains some of ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved.

ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to (although this is not a requirement). It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008 is implemented by over one million companies and organizations in over 170 countries.

2015 ISO News ISO world never stops with the technological advancement and pressure to obtain standards of safety and environmental higher and higher, the revision of ISO themselves became almost a call of duty All ISO standards are reviewed every five years to establish if a revision is required to keep it current and relevant for the marketplace.

In 2015 it will come in to the world two new ISO strandard : ISO 14001:2015 and ISO 9001:2015.

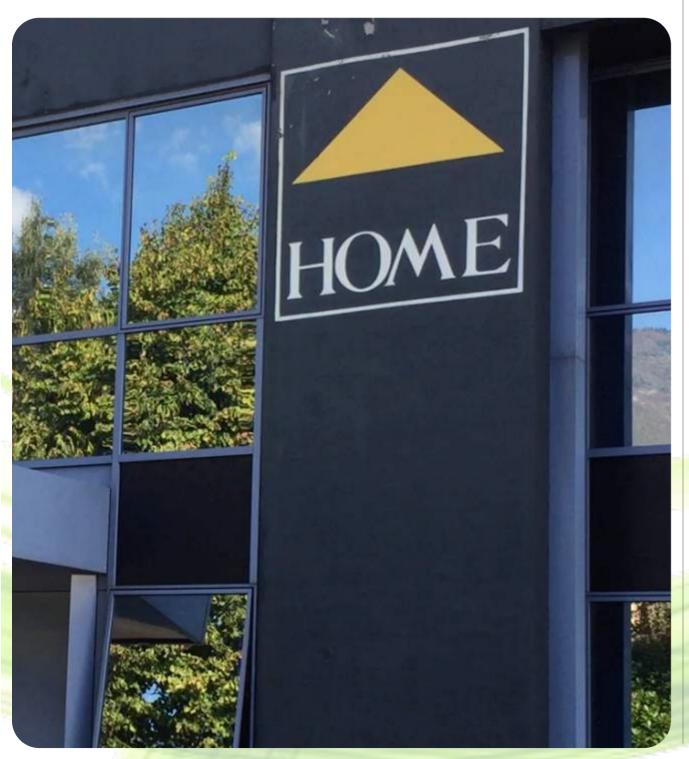
What does it means?

To all organizations and companies that have the old standard are granted a three-year transition period after the revision has been published to migrate their systems to the new edition of the standard.After the transition period the only working standard will be the new standard ISO 14001: 2015 and ISO 9001: 2015

ISO 9001 2015 REVISION UPDATE

SECTION 2

Case study: Home Cucine srl



Home cucine srl, founded in 1988 by three partners among which Agostino Mirsayev, produces modular kitchen.

MISSION

MISSION

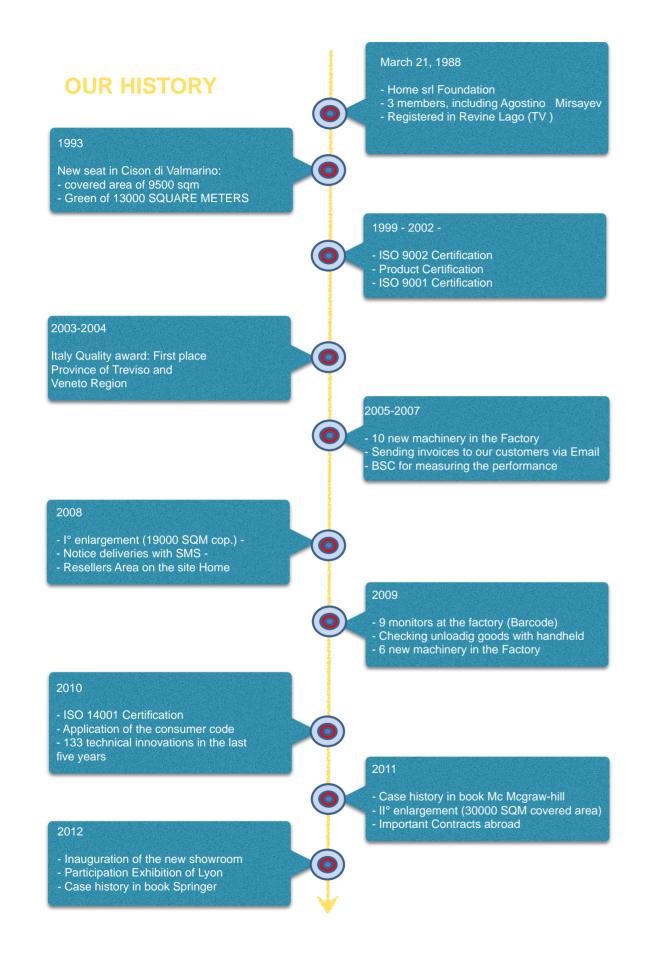
To produce kitchen furniture for domestic use that satisfy the expectations of our customers in terms of safety, functionality, quality/price ratio. Through continuous im-

provement of internal expertise, Home intends to offer customers services also highly innovative, without losing sight of the interests of all stakeholders of the company (parti-

1. Reliability of the product (security and functionality)

cularly the employees) and of the environmental protection.

- 2. High Quality/Price ratio
- 3. Customers satisfaction
- 4. Continuous improvement of the internal expertise
- 5. Innovative services available to customers
- 6. Attention to all stakeholders
- 7. Respect of the Environment



Home cucine srl, trough product and process certification, manages to garantuee a pleasant and fuctional product at once.

In addiction it garantuees environment protection trough an efficient and meticulous separate collection realized during the productive process and using raw materials like ecological panel making this company one of most green of the kitchen industry.



Home cucine, through 14001 ISO Certification, recycles efficiently waste products and packaging materials.

The company operating chart is the following:

HON	ISTRUZIONE OPERATIVA 1 10/	TA-REV: 06/2013
M94 Rep. 0	RACCOLTA DIFFERENZIATA SENERALE	
D	Avvertenze	Tipo Istruzione
334	I rifiuti generati in fabbrica vanno raccolti in modo differenziato come da presente Istruzione	gest.ambiente
335	BOTTIGLIE e TAPPI in PLASTICA —> presso Punti Raccolta Differenziata, nell'apposito bidone contrassegnato	gest.ambiente
336	TETRAPAK e CARTA → presso Punti Raccolta Differenziata, nell'apposito bidone contrassegnato	gest.ambiente
337	PLASTICA e LATTINE → presso Punti Raccolta Differenziata, nell'apposito bidone contrassegnato	gest.ambiente
338	SECCO —▶ presso Punti Raccolta Differenziata, nell'apposito bidone contrassegnato	gest.ambiente
339	VETRO —▶ presso Punti Raccolta Differenziata, nell'apposito bidone contrassegnato	gest.ambiente
340	NYLON -> nei sacchi di nylon (reperibili presso il reparto imballaggio)	gest.ambiente
341	REGGETTE nei contenitori identificati "Reggette"	gest.ambiente
342	ALLUMINIO nei contenitori identificati "Alluminio"	gest.ambiente
343	FERRO e ACCIAIO - ► nei contenitori identificati "Ferro e Acciaio"	gest.ambiente
344	BARATTOLI VUOTI DI VERNICE, OLIO E GRASSO + BOMBOLETTE SPRAY VUOTE → consegnare direttamente al Resp. Produzione	gest.ambiente
345	POLISTIROLO negli appositi sacchetti	gest.ambiente
346	UMIDO —▶ Non è previsto lo smaltimento. Eventuali residui di cibo devono essere smaltiti in aree private	gest.ambiente
347	SCARTI TRUCIOLARE► negli appositi cassoni all'esterno della fabbrica	gest.ambiente
348	Prima di portare i sacchetti nei depositi esterni, accertarsi che siano chiusi in modo perfetto	gest.ambiente
349	E' severamente vietato lasciare in giro (all'interno o fuori dello stabilimento): bottiglie di plastica, bicchieri di carta, fazzoletti di carta e qualsiasi altro genere di immondizia	gest.ambiente
351	In caso vengano ravvisate gravi NC nella raccolta differenziata (anche presso altri reparti) avvisare immediatamente il Resp. Produzione	gest.ambiente
352	La presente istruzione vale per il personale della fabbrica, per quello d'ufficio e per tutte le persone esterne che entrano nello stabilimento	gest.ambiente



The company has waste collection points both in the offices and in the productive plant. The employees have been instructed and pushed to reclycle.

La presente Istruzione elenca le AVVERTENZE PRINCIPALI per evitare: incidenti alle persone; guasti alle macchine; difettosità dei prodotti; danni ambientali.

An example of Home kitchen is the **Colormat** model.



This 2014-2015 collection kitchen exhibits a lot of features that bonding design and green.

The material of the shutter is MDF – E1 class and the paint is water opaque, atoxic and ecological.

The material used for the bottom, the side and the shelves is chipboard E1 class (Saviola ecological panel) with lower than 8mg/100gr formaldehyde emission.



HOME GREEN HOME

We have had the privilege to interview Andrea Frezza, Home Cucine's quality manager.

Why did you decided to certificy yourself 14001?

We decided to be ISO 14001 certify to give continuity in our social responsability path.

The company social responsability shown the businessman's will to manage efficiently social and ethic issues. In 2000 Home cucine achieved product certification to guarantee a safe kitchen to the costumer. Products overcamed strictly mechanical tests in accordance with the 1479 european law on the furniture safe.

With 14001 ISO certification (achieved in 2010) Home aims to guarantee the best environment protecion on behalf of its employees and who lives around the industrial plant. 14001 ISO certification means to call a distinguished body, DNV in our case, to watch out the observance of the environment standard by the company.

To make it clear, if an industrial zone were composed only from 14001 certificated companies, surrounding areas people could sleep safe and sound. That because a professional licensed authority could make recurring checks on all environmental aspects of all industrial zone companies. Aspects like the good conservation of aquifer, a correct system of atmosphere emission, a meticulous separate collection and a tested system of fire prevention.

What are the concrete benefits <mark>obtained by Home srl</mark> with 14001 certification?

In the first place there is a benefit of fame of the brand.

A 14001 certified company is perceived by customers like a green company which respect seriously the environment. This becomes in bigger market share, especially in northern Europe, where customers are more sensitive to the ecological aspects.

Then there were good effects on operating cost, the 14001 certification has saved us 7000 Euro/year on waste disposal costs (since 2010 we pay 1000 euro for the disposal instead 8000 before the certification) and not to metion the reduction of the insurance premium (about 15% less).

The 14001 certification costs about 1500 euro a year for inspection by the certifying body. It's not too expensive.

Last but not least tangible benefit it's tied up to the employees respect to the rules. When the supervisor establishes clear rules for waste disposal within plant, department by department, he transmits an important message to its employees, which could be translated as follow: "we must search for the best precision whatever we do in the plant working, including observance of environmental rules.

We found that all the employees shown the most deference for the waste disposal rules and that confirms us they are trustworthy workers and also they respect the company and their own job.

Any advices to implement and manage easily a ISO 14001 system?

It's necessary to devise a good "environmental control plan", a database cotained all the environmental control identified one by one.

In Home srl i codified 55 environmental control. For each control i included frequency, impact type, control responsible, emission date and prescriptive connection.

Then each control has been copied in an electronic schedule (Outlook in our case) where it pop up automatically the reminders of the established dedlines. In this way it becomes easy to check all the aspects related to ISO 14001 certification, without risk that some compliance remains unfullfilled.



CHAPTER 3

Producing green



Section 1

Maccan



Our experience begins in 1975 with the production of frames for the furniture industry. Over the years, new market needs and a well established business capacity led us to specialize in production of furniture doors and accessories.

The production site is located in Prata di Pordenone, within the industrial area heart of furniture district. The former small artisanal business today is medium size industry , having an indoor area over 18.000 m2 and 50 specialized employees.

Manufacturers of kitchens, bathrooms and living-rooms are our main clients to which we offer a wide range of solid wood doors, veneered doors, or MDF lacquered doors. As well, we offer a really wide range of wood species, able to suit the market highest quality requirements.

In the year 2000 we received the certification according to ISO 9001. The Company Quality Manual applies to the whole production process: from the design, manufacturing, sales, up to the customer service.

Today, our mission is: innovation, speed and flexibility in the manufacturing process. With our staff constantly updated and the latest generation technologies, we offer both solutions matching the market trends and customized products according to the client requirements. In the year 2012 ICILA issues to the Company two important certifications: FSC and PEFC. These markings, identify the row materials we use (wood and timber derived products) as coming from certified forests. Each manufacturing phase complies with the best practice, being monitored with the utmost care by the department employees, all having specific skills in controlling modern automated production systems. The latter are technologically advanced instruments supervising the machining of the raw parts with pantographs, dimension saws and sanders, for duly preparing them to the subsequent stages. The painting processes need special care for choosing inks and the best varnishes; that is an essential requirement for preserving over time the high quality finishing. Each prototype and every new model are developed cooperating directly with the client. We make available to the client an experience of many years in woodworking and design of furniture accessories.

icila

PRIMA EMISSIONE FIRST ISSUE

04/07/2012

CERTIFICATO/CERTIFICATE

SI CERTIFICA CHE LA GESTIONE DELLA CATENA DI CUSTODIA ATTUATA DA WE HEREBY CERTIFY THAT THE MANAGEMENT OF CHAIN OF CUSTODY OPERATED BY

MACCAN Industria Componenti per Mobili S.r.l.

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PRESSO LE SEGUENTI SEDI/SITES INCLUDED IN THE CERTIFICATION

Via Eugenio Rigo 10 - 33080 Prata di Pordenone (PN)

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> PEFC ITA 1002:2010 PEFC ST 2002:2010

PER LE SEGUENTI LAVORAZIONI e PRODOTTI/FOR THE FOLLOWING PROCESSING and PRODUCTS

Produzione di ante e componenti per mobili (abete, frassino, rovere. Approccio: separazione fisica)

Manufacturing of doors and components for furniture (spruce, ash, oak. Approach: phisycal separation).

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Ing, Marina Crippa



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É CONFORME AGLI STANDARD/IS IN COMPLIANCE WITH THE STANDARDS FSC-STD-40-004 V2.1

PER LE SEGUENTI LAVORAZIONI E PRODOTTI/FOR THE FOLLOWING PROCESSING AND PRODUCTS

Acquisto di elementi in legno massello e pannelli in MDF FSC 100%, tranciati FSC 100% e FSC Misto, pannelli in truciolare FSC Misto e FSC Riciclato. Produzione di ante e componenti per mobili FSC 100% e FSC Misto

Purchase of planks and MDF boards FSC 100%, veneers FSC 100% and FSC Mix, particle boards FSC Mix and FSC Recycled. Manufacturing of doors and components for furnitures FSC 100% and FSC Mix

La lista completa dei gruppi di prodotti inclusi nell'ambito di applicazione del certificato è disponibile sul database FSC all'indirizzo www.fsc-info.org The full list of the products groups that are included in the scope of the certificate is available on the database FSC at the address www.fsc-info.org Questo certificato non costituisce evidenza che un particolare prodotto formito dal titolare del certificato sia certificato FSC (o FSC Controlled Wood). I prodotti offerti, spediti o venduti dal titolare del certificato possono essere considerati inclusi nel campo di applicazione del presente certificato solo quando la prevista dichiarazione FSC è attestata chiaramente sulle fatture e sui documenti di trasporto *This certificate Itself does not constitute evidence that a particular* product supplied by the certificate holder is FSC-certified (or FSC Controlled Wood). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents.

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03/07/2017

Ing. Marina Crippa Direttore Generale/Managing Director ICILA S.



SECTION 2

Saviola



The Eco-Ethical Company

Story

1963 | The story begins

From a modest shed in Viadana (MN), in the heart of the Po Valley, emerged the first panel of particleboard by Sadepan, a company that Mauro Saviola founded with his brother and a cousin. The plan to devote himself to the production of panels obtained from scrap wood matured in Mauro's mind during a trip to Germany. After seeing a production plant of panels starting from tree branches that were shredded and subsequently pressed, his thoughts went to the multitude of branches and trunks that piled up along the banks of the Po river.

It was a small leap from there to the realisation that recycled wood panels, especially given the expansion of the furniture market, could easily prove to be a profitable trade.

The forecasts proved to be correct: the product was successful and the first balance sheet of the new company, whose 20 employees had started working in three shifts, broke even. It is the beginning of the great journey that will give life to the Mauro Saviola Group. The energy, that year, was passion and instinct, tenacity and Eco-technological intuition

1973 | Integration and synergy

Sadepan Chimica is born, for the direct supply of resins, melamine resins, and formaldehyde. The profile that began to take shape was of an increasingly integrated industrial reality, constantly projected forward, in the research and development of technologies and solutions always beyond the limits of what we consider cutting edge.

1997 | The ecological panel

The facilities for cleaning used wood (recovered through intense and continuous collection from wood processing industries and from recycling collection) replace at every plant the log shredding lines, which are then permanently dismantled. The company integrates upstream with the regeneration of the raw material: a factory within the factory. From this moment the Saviola Group will only employ used wood to produce the Ecological Panel, a panel made from 100% post-consumer wood.

We are at the point of arrival of the efforts and growth of the Group and, at the same time, at the starting point of a new journey. "ECO-TECHNOLOGY", where the Economy bows completely in the service of Technology, which, in turn, serves Ecology.

Today | The journey continues, with a new direction

The consolidated turnover of the Group has placed it for years among the top 300 Italian industrial realities and among the leaders in the world in the Green Economy sector. But the journey is just beginning. If it is true that until the beginning of the millennium the Group was an extremely complex and fragmented constellation of companies, the passing of the baton to Alessandro Saviola – who succeeded his father in 2009 – initiated a process of radical transformation, culminating in early 2012 with the creation of Saviola Holding.

50 years after the start of the journey, the new leadership launches a new organisational model, transparent, streamlined and efficient, which looks ahead to meet the challenges of today and especially tomorrow. There is one thing that never changes: the passion for this journey, which is the same as always.

> HOME GREEN HOME

The Saviola Group a community that subscribes to the definition given by its founder, "The Eco-Ethical Company."Environment,People, Territory, Quality and Innovation. These are the five core values that differentiate the Group, directly and indirectly attributable to a broader concept of the context of a company: Social Responsibility. The belief, in fact, is that a company's responsibility is not limited to what is required by law, but should include in its strategic vision an ethical concern for the impact of its actions on society, even in the long term



CHAPTER 4

Educating green



"Environmental education" has been taught in schools for years, but the concept changed in time; it started with the defense of nature, moving to a wider range of themes (pollution, environmental emergencies and socio-economic dynamics). In the end we got to the concept of" Education of Sustainable Development" which joins the caring for the environment with socio-cultural factors (peace, health, cultural differences,civil rights) and economical aspects (consumptions, poverty, developed/underdeveloped countries.It is an holistic approach, which touches every aspect of life and values,whose center is the respect for others, present and future generations, diversity, environment and the Earth's resources.



The idea of Education of Sustainable Development fully embeds into the Europe 2020 strategy, which aims to revamp the EU economy within the next decade, while preserving the idea of a sustainable future and promoting a smart growth, sustainable and inclusive.

The intent of building towards new jobs and productivity combines into the european strategy of a strong sensibility about social cohesion and natural resources preservation.

On the same wavelength comes the joint proposal from the Ministry of environment and Ministry of Education, University and Research which on the 14 december 2009 four-handed published "the guidelines for environmental education and sustainable development"sent to every school linked to two contests.The first "things change if..." is dedicated to infant and primary schools and wants to gather in a single publication children's best proposals for environmental and landscape tutelage through manifests, pictures, drawings.The other, "school, environment, and legality" is dedicated to middle to high schools.

The guidelines embed into the track of previous operations which already represented the need to insert into curriculums pieces of environmental education (Cultural axes and key-proficiency of citizenship, Document of aptitude for esperimental teaching of"Citizenship and Constitution") but for the first time they undelrine a methodological approach, based on formative experiences, centered on tasks, to promote into students, proportionally to their age, knowledge and skills that lead to personal abilities development (citizenship skills) and specific disciplinary abilities. The pitch of a new logic, according to which while teaching the attention to discipline and its following and consequential articolated development shouldn t overcome.

In Fact, from teaching logic you have to move toward the logic of learning, where the very core of planning is the situation task where the students can move autonomously to face and complete the task, using the knowledges and skills they possess. Actual routes are made, leading the students to "experiment firsthand implications connected to each topic": an actual space shall be given, where the students can promote their own thoughtful and projectual skills, moving into a context of knowledge and skills actualization.

the guidelines also underline specific strategical priorities:

- natural resources and biodiversity tutelage
- atmospheric pollution and climate change opposition
- renewable power sources sponsoring and power saving
- proper waste cycle management
- fight against environmental crimes and ecomafias
- protection of the sea
- prevention of the many forms of pollution, focusing on urban environment

Basically the educational and didactic proposals dialed by the guidelines aim to promote into the student:

- comprehension of the problematics about the environment's natural and social components and the area he lives

-the awareness that is possible to respect, preserve, enhance and give value to the environment working on specific projects of intervention which can also be proposed to institutional subjects of the belonging community.

- the consideration of natural resources' values- like water availability, ecosystems' variety and balance, biodiversity abundance, and so on- as common good and universal right to revive into families, into communities of peers, into school, into life environments, critical and responsible consumer behavior for these resources, caring for their sustainable development, in favor of the future generations, beside the wellbeing and wealth of the present ones.

So far we considered the key-role of education into building an eco-sustainable culture, but we should also focus on the second goal, far more specific that the formative system can t ignore: an ecologically sustainable economy. In fact it sees the birth of new professions and requires others to changes their approach, renew their competences, work methods or professional profiling, to avoid the extinction for obsolescence or for being anti-ecological. It's conceivable then, that in the near future it will be needed to field every tool to ease the inevitable and important process of mobility, reconversion and requalification of the concerned workers.

The transaction towards a sustainable economics is not just about the productions directly connected to renewable resources or material recycling, but it's an ever growing pervasive phenomena in economics. the reduction of energy consumption, climate changing emissions, atmosphere pollution or waste disposal, regard crosswise every single economic aspect, so, although in different amounts, the skills required trend to concern every human industry.

Schools will have to be ready to prepare the young's both for new jobs and for new transversal competences which will be required for the new professions.

the interest for the labor market toward professions which in some amount connect to the growing interest for the green economy has recently been the object of a thorough investigation from Unioncamere, with the collaboration of Symbola foundation and sponsorship from the ministry of environment and Expo Milan 2015. Into the report GreenItaly 2013 become manifest the huge economical impact that this field has in the italian economy and the outcoming numbers are so great thatthey are astonishing: -the green jobs occupants are more than 3 millions

-other 3 millions and 700 thousands employees have skills to be employed in green fields

-38% of the programmed hiring in 2013 has been in the green field

-61.12% of the overall hiring in 2013, intended for research and development in the italian companies will be covered by green jobs;

A great challenge awaits for the italian school, but there are plenty of tools to match it: beside the institutional documents we already talked about(guidelines and other MIUR indications) there is a whole universe moving to support the formative institutions to achieve this new mandate that the society gave them. You only need to get close to internet to see documented a long row of associations,funds and groups that work to prepare educational courses and materials to support school's educational activities: for instance you can mention Green Education Foundation, non profit organization situated in Massachusetts, or may other italian organization like Green Educational and Green Education online which offer through their sites ideas, documents and materials which can be invaluable for teachers working this front.

-In the Decade of Education to Sustainable Development,announced oft 2005-2014 by the General Assembly of _United Nations, schools shall pick up the challenge to make aware the young and the civil society from all around the world of the need to build a more equitable and concordant future, respectful for the neighbor and to the planet's resources,empowering the role that Education has in sc. route. A concrete example of education and respect for the environment and the recycle theme is the educational proposal of the SAVNO company of environmental services.

this company offers two tracings, one for primary schools and one for secondary schools and third age universities.

the educational training for primary schools includes 5 class activities and 6 visits to recycling implants, while the secondary schools training, 12 lessons and 7 visits.



References and thanks

- Rapporto rifiuti urbani 2013 ISPRA
- Rapporto "Comuni ricicloni" 2014
- HOME srl
- Maccan
- Gruppo Saviola
- DNV-GL
- Università degli studi di Padova
- Comune di Cison di Valmarino
- Pracatinat

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