



## Europass Curriculum Vitae

### Personal information

Surname(s) / First name(s) **Strazza Carlo**  
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E-mail carlo.strazza@unige.it  
Nationality Italian  
Date of birth 27 September 1982  
Gender Male

**Occupational field** Research in Chemical Engineering, Department of Civil Engineering, Chemistry and Environmental (DICCA), University of Genoa, Italy

### Work experience

Date 2007 - today  
Name and address of employer DICCA-Department of Civil Engineering, Chemistry and Environmental (DICCA)  
(ex DICheP- Department of Chemical and Process Engineering "G.B. Bonino") - Università degli Studi di Genova, Via all'Opera Pia 15 – 16145 Genoa, Italia [www.dicca.unige.it](http://www.dicca.unige.it)  
CESISP (Centro per lo Sviluppo della Sostenibilità dei Prodotti). [www.cesisp.unige.it](http://www.cesisp.unige.it)  
Occupation or position held Research engineer – Assistant Professor from 2012

Main activities and responsibilities	<ul style="list-style-type: none"> <li>- Life Cycle Assessment and Carbon Footprint applied to: cement; waste management; Solid Oxide Fuel Cells (SOFC); biomass-based power plants; vegetal oils; water supply, logistics.</li> <li>- Type III Environmental Labels – ISO 14025 (EPD, Environmental Product Declaration): realization of EPDs for various industries and development of PCRs (Product Category Rules) for various sectors.</li> <li>- Emission Trading (EU-ETS) and Climate Change: calculation and monitoring of GHG (Green House Gases) emissions.</li> <li>- Member of PCR Committee - Product Category Rules for Concrete (Carbon Leadership Forum).</li> <li>- Analysis and evaluation of actions and measures on the basis of eligibility standards defined by ISO 14064-2 and UNFCCC. 2012.</li> <li>- Review activity for the data related to the emission reduction project "ARPA Ventialcubo" - obiettivo europeo 20-20-20 - ARPA Lombardia. 2012.</li> <li>- LCA leader for CATION Project "Cathode Subsystem Development and Optimisation" - Fuel Cells and Hydrogen Joint Undertaking (FCH JU). 2011-2013.</li> <li>- Activities for the identification of calculation factors aimed to the quantification of the CO<sub>2</sub> emissions related to printed products. 2011.</li> <li>- Activities for the identification of calculation factors aimed to the quantification of the CO<sub>2</sub> emissions related to air transport by voluntary bodies. 2010.</li> <li>- Representative of Municipality of Genova for EUROCITIES WORKING GROUP ON WASTE MANAGEMENT "Waste framework directives in Europe". Munich, Germany – 16<sup>th</sup>-17<sup>th</sup> September, 2010</li> <li>- Analysis and modeling of processes of syngas purification, from car fluff gasification. 2009-2011.</li> <li>- Member of HIGH TECH RECYCLING. research team for NEWFLUV Project "Valorization of fluff from end-of-life vehicles and WEEE: gasification and energy production" funded within Industria 2015. 2009-2012.</li> <li>- LCA leader for METHAPU Project "Validation of Renewable Methanol Based Auxiliary Power System for Commercial Vessels", Sixth Framework Programme, Priority 1.6.2 - Sustainable Surface Transport. 2007-2009.</li> <li>- LCA leader for LARGE SOFC Project "Towards a Large SOFC Power Plant" , Sixth Framework Programme, Priority 1.6.1 - Sustainable Energy Systems. 2007-2009.</li> <li>- Participation at Working Group "Definition of minimum environmental criteria for GPP of building materials" (National Action Plan on Green Public Procurement, D.M.135/08) 2008.</li> <li>- Member of CE.Si.S.P. research team for the project "Technical review guidance for LCA, embedded into an accredited certification scheme", promoted by EUROPEAN COMMISSION, JOINT RESEARCH CENTRE - Institute for Environment and Sustainability. 2007-2008.</li> <li>- Member of CE.Si.S.P. research team for the project EMPIRE: "Environmental regulation and Market-forces Providing Incentives for Resource Efficiency" – SKEP, Scientific Knowledge for Environmental Protection. 2007-2008.</li> </ul>
Type of business or sector	Research and education
Dates	2011 - today
Name and address of employer	RINA SpA (Certification Body) Via Corsica 12 - 16100 Genova – Italia ( <a href="http://www.rina.org">www.rina.org</a> )
Occupation or position held	Auditor
Main activities and responsibilities	<p>Verification activities</p> <ul style="list-style-type: none"> <li>- LCA/EPD (ISO 14040, ISO 14025)</li> <li>- Climate Change (EU-ETS)</li> <li>- CDM Projects</li> </ul>
Type of business or sector	Verification

Dates	2008
Name and address of employer	ERG SpA Via De Marini, 1 -16149 Genova – Italia <a href="http://www.erg.it">www.erg.it</a>
Occupation or position held	Stage
Main activities and responsibilities	Internship, within the Emission Trading branch of ERG group, with support to ET Manager in EUA, CER, VER market analysis and related contractual back-office.
Type of business or sector	Emission Trading

## Education and training

Dates	2012
Title of qualification awarded	Certificate of attendance
Principal subjects/occupational skills covered	CDM Training Course
Name and type of organisation providing education and training	RINA Services SpA

Dates	2012
Title of qualification awarded	Certificate of attendance
Principal subjects/occupational skills covered	EPD Update 2012 Course
Name and type of organisation providing education and training	RINA Services SpA

Dates	2012
Title of qualification awarded	Certificate of attendance
Principal subjects/occupational skills covered	ETS Calibration Course
Name and type of organisation providing education and training	RINA Services SpA

Dates	2008 - 2011
Title of qualification awarded	<i>PhD in Chemical, Materials and Process Engineering: "Use of waste in cement industry and role of Type III Environmental Labels"</i>
Principal subjects/occupational skills covered	Chemical engineering, Environmental sustainability, Green marketing, Resource efficiency, Life Cycle Assessment
Name and type of organisation providing education and training	Università degli Studi di Genova, Italy

Dates	2009
Title of qualification awarded	Professional qualification
Principal subjects/occupational skills covered	"GHG Manager Junior"
Name and type of organisation providing education and training	KHC (Know How Certification) - <a href="http://www.khc.it">http://www.khc.it</a>
Dates	2007
Titolo della qualifica rilasciata	<i>Degree (corresponding to Master degree) in Chemical Engineering -110 with honors and right of publishing</i>
Principali tematiche/competenze professionali possedute	Chemical and process engineering
Nome e tipo d'organizzazione erogatrice dell'istruzione e formazione	Università degli Studi di Genova, Italy
Dates	2004
Titolo della qualifica rilasciata	<i>1 level degree (corresponding to Bachelor degree) in Chemical Engineering - 110 with honors</i>
Principali tematiche/competenze professionali possedute	Chemical and process engineering
Nome e tipo d'organizzazione erogatrice dell'istruzione e formazione	Università degli Studi di Genova, Italy

### Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

*European level (\*)*

**English**

**French**

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
<b>English</b>	C2	C2	C2	C1	C2
<b>French</b>	B2	C1	B2	B2	C1

(\*) *Common European Framework of Reference for Languages*

Organisational/social skills and competences - Excellent skills in evaluating and interpreting information and data owing to a good expertise in the scientific field.  
- Excellent skills in presenting ideas in a organized, coherent and clear way.

Technical /computer skills and competences - Excellent expertise in LCA calculation models: Boustead Model and SimaPro.

Driving licence EU Driving licence "B"

## Additional information

1. Laboratory research in nanotechnologies – Supervisor: Prof. P.F.Luckham, Professor in Particle Technology, Chemical Engineering Department, Imperial College London (2006-2007) Erasmus programme - Imperial College, London, UK.
2. Granted access to the Italian Engineer's Council in virtue of state examination. 2007.
3. National PhD School in Chemical Engineering, GRICU 2009, Muravera (CA) – Italy, 2009.
4. Young LCA Researchers Award - 2nd place. 2010
5. Lecturer in Master Course in Economy and Environmental Management – MEMA. Università L. Bocconi, Milano, Italy. 2007.
6. Lecturer in Master Course "Management of chemicals – REACH regulation". Università degli Studi di Genova, Italy. 2010.
7. Lecturer in Master in Master Course in Industrial Plant Engineering. Università degli Studi di Genova, Italy. 2010.
8. Lecturer in Master Course in Industrial Plant Engineering and Technologies - MIPET. Università degli Studi di Genova, Italy. 2012.
9. Reviewer for *ASME Journal of Energy Resources Technology*. From 2009.
10. Reviewer for *ASME Journal of Mechanical Design*. From 2010.
11. Reviewer for *Applied Energy*. From 2012.
12. Reviewer for *Journal of Cleaner Production*. From 2012.
13. Reviewer for *International Journal of Life Cycle Assessment*. From 2012.

## Publications

### Scientific publications

- DEL BORGHI M., STRAZZA C., PALAZZI E., DEL BORGHI A. (2011) PM10 secondario ed emissioni di NOx. La Rivista dei Combustibili e dell'Industria Chimica, a cura della Stazione sperimentale per i Combustibili, vol. 65 (3); p. 25-35.
- MESSINEO S., NASO M., DEL BORGHI A., GALLO M., STRAZZA C. (2011) Quantificazione della Carbon Footprint relativa al servizio di captazione, accumulo, trattamento ed adduzione di acqua potabile: l'esperienza di Siciliacque. Ingegneria Ambientale, vol XL n. 4 luglio-agosto 2011.
- STRAZZA C., DEL BORGHI A., GALLO M., DEL BORGHI M. (2011). Resource productivity enhancement as means for promoting cleaner production: analysis of co-incineration in cement plants through a life cycle approach. Journal of Cleaner Production, vol. 19 (14), p. 1615-1621.
- ALFIERI F., STRAZZA C., GALLO M., DEL BORGHI A. (2010) Analisi del Ciclo di Vita dei combustibili fossili: uno strumento di valutazione dell'impatto dei trasporti sul clima. La Rivista dei Combustibili e dell'Industria Chimica, a cura della Stazione sperimentale per i Combustibili, vol 64 (2); p. 31-36.
- STRAZZA C., DEL BORGHI A., BLENGINI G.A., GALLO M. (2010) Definition of the methodology for a Sector EPD (Environmental Product Declaration): case-study of the average Italian cement. International Journal of Life Cycle Assessment, vol. 15; p. 540-548.
- GALLO M., DEL BORGHI A., STRAZZA C., CATTANEO C. (2010) L'analisi del ciclo di vita per determinare l'impatto ambientale - Analisi e confronto dei risultati relativi a sei casi studio sul territorio italiano riguardanti le modalità di smaltimento in discarica, impianto di compostaggio e termovalorizzatore. Rivista ECO – DEA Edizioni. Anno 3, Numero 7 pp.68-70.
- STRAZZA C., DEL BORGHI A., COSTAMAGNA P., TRAVERSO A., SANTIN M. (2010). Comparative LCA of methanol-fuelled SOFCs as auxiliary power systems on-board ships. Applied Energy, vol. 87 p. 1670-1678, ISSN: 0306-2619.
- DEL BORGHI A., GAGGERO P.L., GALLO M., STRAZZA C. (2009). Sviluppo di PCR per impianti di trattamento di acque reflue basato su un caso studio. Ingegneria Ambientale, Anno XXXVIII N.7/8; p.390-398.
- DEL BORGHI M., STRAZZA C., DEL BORGHI A. (2009). Utilizzo di combustibili alternativi nei forni da cemento. influenza sulle emissioni atmosferiche: l'esperienza italiana. La Rivista dei Combustibili e dell'Industria Chimica, a cura della Stazione sperimentale per i Combustibili, vol 63 (1); p. 27-40.
- DEL BORGHI A., GALLO M., STRAZZA C., ALFIERI F. (2009). Carbon Footprint vs Climate Declaration: two tools in comparison. EPD® Newsletter #1 2009.
- GALLO M., DEL BORGHI A., IRALDO F., ALFIERI F., STRAZZA C. (2009) Kyoto ed enti locali: lo sviluppo dei meccanismi volontari nazionali e dei crediti VER. Inquinamento, vol.116 p.44-47 - ISSN:00014982
- DEL BORGHI A., GAGGERO P.L., GALLO M., STRAZZA C. (2008). Development of PCR for WWTP based on a case study. International Journal of Life Cycle Assessment, vol. 13 (6); p. 512-521, ISSN: 0948-3349.

### Congress proceedings

- STRAZZA C., DEL BORGHI A., GALLO M. (2012) Development of Product Category Rules for the application of Life Cycle Assessment to Carbon Capture and Storage. ECOS 2012, The 25th International Conference on efficiency, cost, optimization, simulation and environmental impact of energy systems, June 26-29, 2012, Perugia – Italy.
- DEL BORGHI A., STRAZZA C., DE GASPERI A., TARAMASSO A., ROBBA M., CINQUETTI P. (2011) LCA and optimization - A combined decision tool for the assessment of the biowaste separate collection in the municipality of Cogoleto, Northern Italy. Sardinia 2011, Thirteenth International Waste Management and Landfill Symposium, 3 - 7 October 2011, Santa Margherita di Pula – Italy.
- STRAZZA C., DEL BORGHI A., GALLO M. (2011) Development of Product Category Rules for a Sector Environmental Product Declaration. Proceedings: SETAC Europe 21st Annual Meeting, 15-19 May 2011, Milan – Italy.
- ARATA S., STRAZZA C., LODI A., DEL BORGHI A. (2010). Microalgae-based Carbon Sequestration: growth of Spirulina Platensis with flue gas feeding. 14th International Biotechnology Symposium and Exhibition. Rimini , 14-18 September 2010. In: Journal of Biotechnology, Vol. 150, Supplement 1, November 2010, pp. 279, doi:10.1016/j.jbiotec.2010.09.201.
- STRAZZA C., DEL BORGHI A. (2010) Analisi del ciclo di vita (LCA) e definizione di regole specifiche (Product Category Rules, PCR) per la produzione di energia elettrica mediante celle a combustibile a ossidi solidi (SOFC). in: Atti del Convegno Scientifico della Rete Italiana LCA, Padova - 22 aprile 2010" Editore: ENEA (2010) - ISBN: 978-88-8286-226-8.
- ARATA S., DEL BORGHI A., LODI A., STRAZZA C. (2008). Abbattimento NOx tramite Spirulina platensis, analisi energetica ed ambientale. Convegno GR.I.C.U. 2008. Le Castella (KR), 14-17 Settembre 2008.
- STRAZZA C., DEL BORGHI A., GALLO M., PRONZATI C., ARATA S. (2008). Comparative LCA of Solid Oxide Fuel Cells (SOFC) fueled with methanol for marine applications. Convegno GR.I.C.U. 2008. Le Castella (KR), 14-17 Settembre 2008.

### Standardisation Requirements

- PCR (Product Category Rules – ISO 14025) registration number: 2010:9. Approval date: 2010-09-15. "Cement". Product group/service type: Group: 374 Plaster, lime and cement (UN CPC code: 3744). Issuing body: The International EPD Cooperation (IEC). International EPD® System.

I do hereby authorize treatment of my personal data pursuant to Law. 196/03.

Genova, 3<sup>rd</sup> September 2012

A handwritten signature in black ink, appearing to read 'L. Strazza'.