I- Personal information

Name: Carlos Manuel Forte Cardoso

Birth date: July the 24th, 1971

Address: Travessa das Lapas Negras, 10

Vilarinho- Brasfemes 3020 – 578 COIMBRA

Telephone: +351 91 2300861

e-mail: carlos.forte.cardoso@gmail.com



II- Professional experience

GREENFLOW MARINE - SERVIÇOS MARÍTIMOS AMBIENTAIS S.A (EX. NPRF PORTUGAL)

Period From 01.09.2018 – until now

Function or position | CEO and 55% shareholder

Main activities or responsibilities | Operational, commercial, business politics, strategy, authorities' contacts,

etc...

Company sector Environment, waste treatment, maritime wastes, fuel production from

recycling of hydrocarbons waste, design of modular equipment for on-site

treatment. (<u>www.greenflow.pt</u>)

Average annual Turnover | 3.000.000€

2. GREENFLOW - ENGENHARIA PARA A GESTÃO DE RESÍDUOS LDA.

Period From 02.02.2014 – until now

Function or position | CEO and owner

Main activities or responsibilities | Operational, commercial, business politics, strategy, authorities' contacts,

lobbying, etc... Appointed by NATURE GROUP

Company sector Environment, waste treatment, Engineering solutions for waste,

consultancy, design of modular equipment for on-site treatment.

(www.greenflow.pt)

Average annual Turnover | 400.000€

3. NPRF PORTUGAL - SERVIÇOS MARÍTIMOS AMBIENTAIS S.A (NATURE GROUP)

Period From 01.08.2012 – 31.08.2018

Function or position | CEO of the company and Member of the Management Team of NATURE

GROUP

Main activities or responsibilities | Operational, commercial, business politics, strategy, authorities' contacts,

etc... Appointed by NATURE GROUP leading company in Rotterdam

MARPOL waste collection.

Company sector | Environment, waste treatment, maritime wastes, fuel production

(www.ngrp.com)

Average annual Turnover | 3.000

3.000.000€

4. SOGILUB - SOCIEDADE GESTORA DE ÓLEOS LUBRIFICANTES USADOS-Lisbon(lubricant's wastes national association)

Period From 01.01.2013 – until now

Function or position | Executive Board Member

Main activities or responsibilities | Member appointed by UNIOIL (Portuguese Association for waste lubricant

oil collection)

Company sector National Collection System of Waste Lubricant oils (www.sogilub.pt)

Average annual Turnover | 10.000.000€

5. CARMONA SOCIEDADE DE LIMPEZA S.A - Azeitão

Period From 01.01.2011 – 31.12.2012

Function or position External Technical Consultant

Main activities or responsibilities Advisor for the project of the new treatment plant for hazardous wastes.

Company sector Environment, waste treatment, industrial maintenance (<u>www.carmona.pt</u>)

Average annual Turnover | 12.000.000€ (>100 employees)

6. PROCESOIL S.L- Naron - Galiza - Spain

Period From October 2010 – to end 2012

Function or position Technical advisor

Main activities or responsibilities | Project manager and engineering designer, for a new hazardous waste

treatment plant in Galicia.

Company sector Environment, waste treatment, hydrocarbons, fuel production.

Average annual Turnover | 3.000.000€

7. ENVIROIL AMBIENTE E ENERGIA LDA. - Torres Novas

Period From October 2010 – 31.12.2012

Function or position | Consultant for new projects

Main activities or responsibilities | Consultant and part of the Project Executive Team, to build a waste oil re-

refinery plant, for 20.000 MT/year capacities.

Business advisor for the existing plants and companies of the group.

Company sector Environment, oil re-refining and recycling

Average annual Turnover 9.000.000€

 EGEO TECNOLOGIA E AMBIENTE S.A – Sacavém (ex- AUTO-VILA S.A)

Period From 01.01.2010 to 28.09.2010

Function or position | Member of the board, and member of the Executive Team

Main activities or responsibilities | Executive Manager for the Hazardous Waste Treatment, Solvent Recycling,

Industrial Maintenance and Treatment Facilities, maritime waste collection

and treatment, fuel production.

Company sector | Environment, waste treatment, industrial maintenance (www.egeo.pt)

Average annual Turnover 65.000.000€ (600 employees)

9. SISAV — Sistema Integrado de Tratamento e Eliminação de Resíduos S.A - Chamusca

Period From 21.05.2008 to 30.09.2010

Function or position | Member of the board, and member of the Executive Team

Main activities or responsibilities | Executive Manager for the Treatment plant, Maritime, Operational,

Commercial, External communication and authorities contacts.

Company sector | Environment, waste treatment (<u>www.sisav.pt</u>)

Average annual Turnover | 10.000.000€

Period January 2004 (Project and commissioning period) to 21-05-2008

Function or position | General Manager

Main activities or responsibilities | Manager of the International Project Team (initial investment project

depends on VEOLIA head office in Paris). Managing all the construction (28 million Euros investment), commissioning, initial company politics,

recruitment, business building, company start-up etc...

Company sector | Environment, waste treatment

10. EGEO SOLVENTES S.A - Pombal (former ECOSOCER Lda.)

Period From 19.06.2008 to 28.09.2010

Function or position | CEC

Main activities or responsibilities | Operational, commercial, business politics, strategy, authorities' contacts,

lobbying, etc...

Company sector | Environment, waste treatment (solvent recycling by distillation)

Average annual Turnover 3.500.000€

11. SOGILUB - SOCIEDADE GESTORA DE ÓLEOS LUBRIFICANTES USADOS-Lisbon

Period From 20.06.2008 to 17.06.2010

Function or position | Member of the Board

Main activities or responsibilities | Member appointed by UNIOIL (Portuguese Association for waste lubricant

oil collection)

Company sector National Collection System of Waste Lubricant oils (www.sogilub.pt)

Average annual Turnover 10.000.000€

12. EUROMAINTENANCE S.A - Algés

Period March 2008 – 05.01.2009 (the company is absorbed by AUTO-VILA S.A)

Function or position | CEO

Main activities or responsibilities Operational, commercial, business politics, strategy, authorities' contacts,

lobbying, etc...

Company sector industrial maintenance

Average annual Turnover 7.000.000€ (110 employees)

13. AUTO-VILA - Reciclagem de Resíduos Industriais S.A - Sacavém

Period 11.06.2008 – 31.12.2009 (company is merged within EGEO Group)

Function or position | CEO

Main activities or responsibilities | Operational, commercial, business politics, strategy, authorities' contacts,

lobbying, etc...

Company sector | Environnement, waste treatment, industrial maintenance, maritime waste

collection and treatment, fuel production

Average annual Turnover | 20.000.000€ (> 100 employees)

Period September 2003 to 11.06.2008

Function or position General Manager

Main activities or responsibilities | Operational, commercial, enforce business politics, enforce board strategy,

authorities' contacts, etc...

Company sector | Environment, waste treatment (a VEOLIA company until 2006)

Period 18.06.2002 to September 2003

Function or position | Waste Treatment Manager

Main activities or responsibilities | Manager for the waste exportation and treatment solutions

Company sector | Environnement, waste treatment

AUTO-VILA was renamed in 2010 as EGEO TECONOLOGIA E AMBIENTE S.A, and has absorbed the following companies in a merging operation: IPODEC & EUROMAINTENANCE.

AUTO-VILA was a VEOLIA ENVIRONNEMENT 100% company until first quarter of 2005.

14. ECOSOCER - Recuperação de solventes e resíduos, Lda. - Pombal

Period From May 2000 to 14.06.2002

Function or position | General Manager

Main activities or responsibilities | Operational, commercial, enforce business politics, enforce board strategy,

authorities' contacts, etc...

Company sector Environment, waste treatment, solvent recovery by distillation

Period From May 1998 to May 2000

Function or position | Commercial

Main activities or responsibilities | Commercial activity to improve waste solvent collection, and solvent

recovered (as product) sales

Company sector | Environment, waste treatment, solvent recovery by distillation

Stora Celbi Celulose da Beira Industrial S.A - Leirosa - Figueira da Foz.

Period From 03.03.1997 to 21.12.1997

Function or position trainee

runction of position

Main activities or responsibilities | Characterization of all wastes generated in pulp mill

Company sector | Paper pulp production

III- Education and formation

1. Academics

Coimbra University - Science college

1998- Chemical Engineer Degree

Main works and papers:

- "Polyacrylates production"
- "Atmospheric pollution in industrial sites"
- "Isopropanol plant project"
- "Catalytical Oxidation in Reverse reactors"

Secondary studies: Lycée Bartholdi - Colmar (68.000 FRANCE)

1990- "Baccalauréat" type D (Biology and physics)

All degrees before University, courses in France.

2. Course Stage

SOPORCEL Sociedade Portuguesa de Papel S.A - Lavos - Figueira da Foz.

1996/1997 - Trainee of Celulose Technology

3. Complementary formation

May 2013 Theme: Authorised Gas Tester (Certified) for

Atmosphere Testing – Confined Spaces Atmosphere Testing – Hot Work Atmosphere Testing – Purging

Local: Bristol

Organization: SCIENCO **Main trainers:** Gary Taylor

Duration: 4 days

6 November 2008 Theme: "Mini MBA"

Local: SISAV Chamusca
Organization: VANTAGEM +

Main trainers:

Mario Marques, Rute Martins e Hugo Moreira

Duration: 30 hours

14 September 2006 Theme: "Quality Intranet"

Local: AUTOVILA head office Organization: Ambisig Duration: 8 hours

November Theme: "Environmental audits "

Local: Head of AEP - Porto

2000

Organization: AEP Duration: 21 hours

Curriculum Vitae

3 – 25 November Theme: "Waste Management Advanced course"

2000 Local: Hotel Alif

Organization: Ambiforum

Main trainers:

Dr. Ludwig Krämer(Head of Dept. of Waste Management in the European Commission); Dulce Pássaro (President of the Portuguese Waste Institute at the time, and Environment Minister in 2010); Prof. Dr. José Santos Oliveira (UNL/FCT.); Drª. Constança Peneda (INETI);

Duration: 48 hours

October andTheme: "Waste treatment "NovemberLocal: Head of AEP - Porto

1999 Organization: AEP
Duration: 21 hours

June, July, Theme: "Gas net and piping design"

September, 1999 Local: Instituto de Emprego e Formação Profissional de Aveiro

Organization: ISQ / Instituto de Soldadura e Qualidade

Duration: 120 hours

May 1998 Theme: "Waste treatment and solvent recovery"

Local: Barcelona

Organization: DERPIN S.A **Duration:** 3 weeks full time

April Theme: "Solid waste laboratory analysis"

Local: Stora Celbi - Leirosa

Organization: Stora Celbi / INETI Duration: 14 to 18/04/1997 Trainer: Eng.º João Seabra - INETI

IV – Personal skills and competences

Birth languages: Portuguese and French

Others languages

	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
Spanish	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
English	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user

- Member of the Board of UNIOIL Portuguese association for waste oil collection and treatment, 2007 to September 2010;
- Junior Football player, in France, from 1980 to 1990; Senior Football player, season 1990-1991, Portuguese National III Division;

V - Organization skills and competences

- Good leadership capacity and motivation of working teams;
- Good capacity to manage stress situations;
- Good capacity to deal with emergency situations (industrial accidents, fires) acquire in practical experience or incidents;
- Good capacity to deal with Press (written and television) acquire through several interviews to newspapers (Diário de Notícias, Correio da Manhã, Público and Expresso), national television (RTP2 i.e Portuguese Channel 2), technical review and papers, national radios (TSF e Antena 1).

VI - Technical Skills

- Project management, plant construction&design, waste management, waste oil re-refining, solvent recovery, maritime
 wastes collection and treatment, landfill for hazardous wastes, fuel production, water treatment, long term contracts
 for maintenance and waste collection in refineries;
- Strong experience in management, financial, accounting (SNC), customs laws, people leadership (I had 200 people under my direct command at EGEO), marketing, commercial strategy and *Project Finance with banks*;
- Strong experience in environmental laws and commercial laws;
- Strong knowledge and contacts with national authorities (Environmental Agency, etc...)

VII - Computers and IT skills

- Strong experience in Microsoft Office and Visio.
- Programmer with good practice in FORTRAN and BASIC
- User with good practice in AUTOCAD

X – Participation in conferences, fairs and exhibits

- 5º National Waste Forum –LNEC Congress Center, April 2011.
- Industrial Waste Management APEMETA, 31 de March 2011, Lisbon Metro Conference Room
- "Relvão Ecopark, social, environmental and economical future", 8 September 2007, Chamusca
- Public presentation of the Eco-Parque do Relvão Project, Carregueira Chamusca –S. Francisco building 9 de March de 2007
- POLLUTEC Lyon, 28 a 1 de December de 2006
- ABOUT BLUE COMUNICATION Environmental Conference Hotel Tivoli Lisbon, October 10th, 2006
- Sogilub Presentation of the Waste collection system Lisbon, 4 de October de 2005.
- II Iberic Congress about Industrial waste production and treatment Instituto para la Sostenibilidad de los Recursos (ISRCER) Madrid, June 2005
- 3.º annual Workshop in Process Engineering Chemical Engineering Dept. , 19 de April de 2005
- Waste management and resources in Portugal Instituto para la Sostenibilidade de los Recursos Lisbon, 13 and 14 de May, 2004
- EXPOAMBIENTE 2004 Environmental International Fair Exponor Porto

Curriculum Vitae

- I Iberic Congress about Industrial waste production and treatment Instituto para la Sostenibilidad de los Recursos (ISRCER) Seville, 12th and 13th June, 2003.
- ECOMED POLLUTEC Fira International de Barcelona Barcelona, 11 and 14th March, 2003.
- EXPOAMBIENTE 2003 Environmental, Gas and energy fair Lisbon.
- APEMETA IPPC Conference Pequeno Auditório da Culturgest 15 de March de 2002
- Pollutec Salon International de l'Environnement Paris, 4 a 7 de December de 2001.
- Expoambiente Environmental, Gas and energy fair Lisbon, 7-11 November de 2001.
- Directiva IPPC and EPER in Portugal APEQ Head of Portuguese Engineer Commission Lisbon, 3 October 2001.
- Member invited by the Portuguese Government to participate in the Portuguese delegation to the inauguration of the "1st environmental fair of Galicia" (Ecopolis Community; APEMETA) Vigo 5 June 2001.
- ECOMED POLLUTEC Barcelona, 7 to 10 February 2001.
- Environmental audits APEQ Head of Portuguese Engineer Commission Lisbon, September de 2000.
- IFEMA Environmental international fair Madrid, June de 2000.
- Fire Security in industrial plants Equitotal / SKUM Lisbon, June de 2000.
- Hazardous Products transportation Ilustre Colegio Oficial de Quimicos de Galicia Palácio Soutomaior Pontevedra SPAIN- 19 Maio de 2000.
- EXPOAMBIENTE Environmental, Gas and energy fair November 1999.
- IFAT99 ("International Trade Fair for Environment, Waste Water and Waste Disposal") May 1999 MUNICH
- Deputy in the "Hazardous waste management event" Hotel Altis Park 21 and 22 de April de 1999 LISBON
- EXPORECYCLING98 (Barcelona Fair) exposing solvent recovery June de 1998

XI - Speaker at conferences and events:

May 2015 Conference Theme: Used lubricants, from waste to the new life

Presentation Theme: Collection of lubricant waste oils in Portugal (representing Sogilub)

Local: COIMBRA UNIVERSITY

Organization: Chemical Engineering Dept.

December the 21st, 2012 Conference Theme: Waste as raw material

Presentation Theme: Re-refining of lubricant waste oils in Portugal (representing Enviroil)

Local: COIMBRA UNIVERSITY

Organization: Chemical Engineering Dept.

April 2010 Conference Theme: 4º National Waste forum

Presentation Theme: "Waste treatment: Things are not always like that seem"

Local: Hotel Tivoli Expo Organization: About Media **22/23 April 2009 Conference Theme:** 3º National Waste forum

Presentation Theme: "The CIRVER SISAV"

Local: Hotel Tivoli Expo Organization: About Media

6 Abril 2009 Conference Theme: "Wastes, innovation and challenges"

Presentation Theme: "The CIRVER SISAV"

Local: Chamusca Theatre **Organization:** APEA

2 Abril 2008 Conference Theme: 2^a waste conference

Presentation Theme: "CIRVER, skills and treatment criteria's"

Local: Hotel Tivoli Expo Organization: About Media

18.05.2007 Conference Theme: "Eco Parque of Relvão"

Presentation Theme: "The global Project for the Eco Parque do Relvão"

Local: Misericórdia de Chamusca Theatre **Organization:** Chamusca Municipality

09.05.2007 Conference Theme: "Contaminated soils"

Presentation Theme: "Soil remediation techniques"

Local: university of Guarda

Organization: IPG – Área de Geotecnia e vias de Comunicação do DEC.

22.03.2007 Conference Theme: "Wastes – new strategy"

Presentation Theme: "Final treatments of hazardous wastes: cooperation between cement

kilns and CIRVERs"

Local: Hotel Tivoli Tejo – Lisbon

Organization: About Blue Conferências e Água & Ambiente.

08.03.2007 Conference Theme: Soil remediation techniques and cases studies

Presentation Theme: "Soil remediation techniques"

Local: Instituto Superior de Engenharia do Porto

Organization: Instituto Superior de Engenharia do Porto

15.12.2006 Conference Theme: "Strategic for analysis and soil remediation"

Presentation Theme: "Soil remediation techniques" **Local:** Head of Portuguese Engineer Commission - Lisbon

Organization: Conselho Regional do Colégio de Engenharia Geológica e de Minas

25.10.2006 Conference Theme: "Water and wastes"

Presentation Theme: "Waste management solutions" **Local:** Centro Cultural de Macieira de Cambra Auditorium

Organization: EDV Energia e CEDV

17.05.2006 Conference Theme:" 7.ª Great conference of Jornal Água & Ambiente Magazine"

Presentation Theme: Waste oil re-refinning

Local: Centro Cultural de Belém **Organization:** Jornal Água & Ambiente

31.04.2006 Conference Theme:: *Public consultation of the CIRVER project*

Presentation Theme: "The CIRVER SISAV project"
Local: Salão da Avuca, Carregueira - Chamusca
Organization: SISAV, Chamusca Municipality

Curriculum Vitae

11.04.2006 Conference Theme: Public consultation of the CIRVER project

Presentation Theme: "The CIRVER SISAV project"

Local: Parque Ambiental de St. Margarida Auditorium - Constância

Organization: SISAV, Constância Municipality

07.04.2006 Conference Theme: Public consultation of the CIRVER project

Presentation Theme: "The CIRVER SISAV project"

Local: Sociedade Arripiadense Auditorium, Arripiado - Chamusca

Organization: SISAV, Chamusca Municipality

24.03.2006 Conference Theme: Public consultation of the CIRVER project

Presentation Theme: "The CIRVER SISAV project"

Local: Chamusca City Hall

Organization: SISAV, Chamusca Municipality

30.03.2001 Conference Theme: "Hazardous waste management"

Presentation Theme: "Solvent recovery"

Local: Culturgest Auditorium - Caixa Geral de Depósitos - Lisbon

Organization: APEMETA – Associação Portuguesa de Empresas de Tecnologias Ambientais

10.03.2001 Conference Theme: "Hazardous waste management"

Presentation Theme: "Solvent recovery"

Local: Pombal Municipal Library

Organization: Portuguese Chemical Engineering Commission

XII- Papers published as author or co-author

CARDOSO, CARLOS – "The first integrated treatment center of hazardous wastes", Magazine Industria e Ambiente – 4º Quarter 2007, n.º47 pág. 6-10.

CARDOSO, CARLOS – "From the paradigm of the last decade on the road to maturity", Magazine Mais Ambiente – September 2007, n.º5 pág. 14-16

CARDOSO, Carlos – "Solvent recovery, the right option", ABC Ambiente – Journal of Quercus (Portuguese environmental ONG), Lisbon, 2000, n.º 22 pág. 26.

- C.T. Pinheiro 1, V.R. Ascensão 1, M.M. Cardoso 1, C.M. Cardoso 2, M.J. Quina 1 and L.M. Gando-Ferreira 1 "PHYSICOCHEMICAL CHARACTERIZATION OF USED LUBRICANT OILS FOR MAXIMIZING THEIR REGENERATION POTENTIAL", 6th International Conference on Engineering for Waste and Biomass Valorisation May 23-26, 2016 Albi, France
- C.T. Pinheiro, V.R. Ascensão, C.M. Cardoso, M.J. Quina, L.M. Gando-Ferreira, "AN OVERVIEW OF WASTE LUBRICANT OIL MANAGEMENT SYSTEM: PHYSICOCHEMICAL CHARACTERIZATION CONTRIBUTION FOR ITS IMPROVEMENT", Journal of Cleaner Production. 150 (2017) 301-308. doi: 10.1016/j.jclepro.2017.03.024.

XIII- Positions in Associations

VICE CHAIRMAN OF EUROSHORE INTERNATIONAL - Brussels Area, Belgium (<u>www.euroshore.com</u>)

From May 2016 - until now

Euroshore was founded in 1998 and now has members in Belgium, Gibraltar, France, Germany, Greece, Italy, Estonia, Malta, Nigeria, the Netherlands, Spain, Portugal, Romania, Turkey and the United Kingdom.

The main objective of the Association is to promote and further the interests of companies that are active in the area of ships waste management.

To promote the use of its members port reception facilities

To promote the efficient and environmentally sound disposal of ships waste

To promote relevant international policy, procedures and standards of competence for the collection and processing of ships waste

To promote healthy and fair competition. Past activity has seen the Association closely involved in the development and implementation of the European Directive (2000/59/EC) on Port receptions facilities for ship-generated waste and cargoresidues

• VICE CHAIRMAN OF PRODEQ – ASSOCIATION FOR THE DEVELOPMENT OF THE CHEMICAL ENGINEERING (UNIVERSITY OF COIMBRA)

From May 2015 until now

PRODEQ is the an Association created by the Chemical Engineering Department of Coimbra's University, to promote the Chemical Engineering though Investigation projects developed in partnership with private industries.