



## Miami-Florida Jean Monnet Center of Excellence EU Jean Monnet Project “Renewable Energy: The Future of Biofuels”



From left to right: Dr. Philippidis, Dr. Groebel, Christine Caly-Sanchez, Alexandre Wagner, Dr. Glab, Robert Downing, Dr. Aburub, Dr. Thiel

Under the framework of the EU Jean Monnet Project, European and American renewable energy experts met during two days in January with the Miami-Dade community at large, environment experts, economic actors (directors of renewable energy of Miami-Dade County, Chambers of Commerce members, Consuls, and Miami-Dade Government members, university faculty). At these workshops and meetings, Florida investment in research and development of biofuels, including the use of sugar and sweet sorghum were discussed. It was also covered the need for renewable energy sources such as solar and wind. Challenges and solutions to climate change, renewable energy regulations and policies in the United States and Europe were also addressed.

The workshops were the following:

- Jan. 19, 2017 | 12:00 —2:00 p.m.

“Renewable Energies: Presentation on the French & European Innovative Projects through the Investment Program for the Future” Luncheon-Workshop at Venture Hive—[click here](#)

- Jan. 20, 2017 | 8:30 —10:45 a.m. “Renewable Energy: The Future of Biofuels” - Breakfast-Workshop at Greenberg Traurig Miami Downtown—[click here](#)
- Jan. 20, 2017 | 12:30—2:30 p.m. “Renewable Energies and Biofuels: Lessons from Transatlantic Experiences” - Luncheon-Workshop at Greenberg Traurig Downtown Miami—[click here](#)

The workshops brought more than 70 people from the Miami-Dade community at large.

The Miami-Florida Jean Monnet Center of Excellence would like to thank its partners and co-sponsors:

Greenberg Traurig LLP; Venture Hive, the European chambers of commerce executive directors and presidents (France, Germany, Italy, Spain, UK), the Consulate General of the Federal Republic of Germany, for making each of these events a success. A particular thanks to Robert Downing and Antonio Pena at Greenberg Traurig; Pascale Villet at the French American Chamber of Commerce Florida; Susan Amat at Venture Hive; Hon. Annette Klein, Consul General of Germany in Miami; the Consulate General of France in Miami, and the French Embassy in Washington DC, for their support. We look forward to seeing all of our friends and partners at our upcoming events.

*By Christine I. Caly-Sanchez*



► For more information on the three events, [click here](#).

► Visit our website page [here](#)



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## EU Jean Monnet Project

### Renewable Energy: The Future of Biofuels Workshop Greenberg Traurig - 1/20/2017



From Left to Right: Dr. Aburub, Dr. Philippidis, Dr. Groebel, Robert Downing, Alexandre Wagner, and Dr. Glab

In January, the Miami-Florida Jean Monnet Center of Excellence organized three workshops on renewable energy: the future of biofuels. On January 20<sup>th</sup>, in the morning, European and American experts on "renewable energy" met with the Miami-Dade community at large and environment leaders in the offices of Greenberg Traurig, LLP in Downtown Miami. The workshop entitled **"Renewable Energies and Biofuels: Lessons from Transatlantic Experiences"** included a discussion on the pressing issues of renewable energies, biofuels, feasibility and their political and economic implications. Challenges and solutions to climate change, Florida investment in research and development in biofuels, the need for renewable energy sources, regulations and policies in the United States and Europe were also discussed.

Dr. Glab, Director, Global Energy Security Forum, FIU, was the moderator for six distinguished experts (to view bios, [click here](#)):

- **Dr. Haneen Aburub**, Postdoctoral Research Associate, Department of Electrical and Computing Engineering, FIU Miami, FL
- **Dr. George Philippidis**, Associate Professor, Director Biofuels & Bioproducts Lab, Patel College of Global Sustainability, USF Tampa, FL
- **Dr. Annegret Groebel**, Head of Department International Relations/Postal Regulation, BZnetZA (Bundesnetzagentur), Federal Network Agency, Germany + Vice President, CEER (Council of European Energy Regulators)
- **Dr. Arif Sarwat**, Associate Professor Department of Computing and Electrical Engineering; Director of the FIU and FPL Solar Research Facility and EPS
- **Mr. Robert Downing**, Shareholder, Greenberg Traurig, P.A., Houston and Miami
- **Mr. Alexandre Wagner**, Senior Project Manager, Investments for the Future Program, ADEME, The French National Environment and Energy Management Agency, France.
- **Dr. Edward Glab**, Director, Global Energy Security Forum, FIU

The Workshop began with presentations from all of the panelists. Dr. Aburub, began the day with her presentation on behalf of Dr. Sarwat's **Energy, Power & Sustainability (EPS) Research Group** which study's renewable energy integration optimization. The project is interested in solar energy and storage. It is a \$7.65M



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## EU Jean Monnet Project

### Renewable Energy: The Future of Biofuels

Greenberg Traurig - 1/20/2017

GT GreenbergTraurig



Dr. Arif Sarwat, Director  
FIU and FPL Solar Research Facilities and EPS



Alexandre Wagner  
Senior Project Manager, ADEME



Alexandre Wagner and Dr. Annegret Groebel,  
Head of Dept. International Relations, BZnetZA

research initiative with FPL/NextEra Energy entitled "Energy Power Reliability And Analytic Center (EPRAC)", which conducts high-end studies on the effect of high penetration PV integration into the Smart Grid's reliability, power quality and other aspects. Following lunch, the panel was joined by Dr. Sarwat, Director of the FIU and FPL Solar Research Facility and EPS. Himself and expanded on Dr. Aburub's earlier presentation.

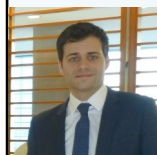
The projects focuses on PV solar, wind and intends to include biomass. "With the recent restrictions on Co2 emissions, the future is great. Here in Miami, we are interested in scaling PV solar projects to the commercial level. Notably, our lab work with FPL. For Miami to shift to renewables, we need to reformulate how the grid operates. The main challenge for the grid is the intermittent nature of renewable energy. Of course, there is a lot of sun in Miami, but due to cloud coverage, solar energy production is not consistent. We need to find ways to store extra energy produced by solar for later usage. To optimize the grid we need to determine when to use which resource and at which time," said Dr. Sarwat.

Following Dr. Aburub, Mr. Wagner, Senior Project Manager, ADEME, discussed **Renewable Energy: The Future of Biofuels**. The presentation gave an overview ADEME's role

in innovation and renewable energy. ADEME is "a French public body whose main mission is to promote innovation and finance the marketing of new technologies that are linked to the energy and the environment." Mr. Wagner continued, "currently, we have a multi-year program of 3.1 billion euros called the investment for the future program." ADEME finances universities, research centers, SME's and industrial companies. Finances are allocated for first commercial grants, pilot financing and new market solutions. The financing schemes offers researchers grants and refundable loans. Notably, refundable loans are only due if the agreed upon commercial mile stones are hit.

Presently, ADEME finances a floating windmill project. The next step for wind energy is offshore. Mr. Wagner explained, "moving offshore allows windmills to catch higher winds and are less dependent on wind conditions. To test varying conditions, floating windfarms have been placed in the Atlantic and Mediterranean seas. The locations were selected to simulate open and closed sea conditions."

Renewable energy has a bright future in France. Since the introduction of the new Energy Transition Act, by 2025 France aims to reduce the amount of energy produced by Nuclear from 75 percent to 50 per-



Alexandre Wagner  
Senior Project Manager

Investments for the Future Program ADEME, The French National Environment and Energy Management Agency France

Alexandre Wagner has about 10 years' experience in renewable energies financing. Since 2012 as Senior Investment Manager at the ADEME, he has been in charge of minority equity investments, in behalf and in the name of the French State, in startups, joint ventures or infrastructures projects.

He also managed call for tenders launched by the French State aiming to finance the construction of tidal & floating offshore wind pre-commercial farms.

Prior to joining the ADEME, Alexandre was Project Finance Manager at Lanco Solar International. He previously served as Project Finance analyst at IKB Deutsche Industriebank, where he financed wind farms and large-scale PV projects. He holds a Master Degree in Politics (Sciences Po Bordeaux) and a MSc Degree in Finance (ESCP Europe).



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## EU Jean Monnet Project

### "Renewable Energies and Biofuels" Workshop

Greenberg-Traurig 1/20/2017



Dr. Annegret Groebel



Robert Downing



Dr. George Philippidis

cent, and at the same time, double the amount of renewable energy produced. "Right now we produce 16 percent of our energy from renewables. The idea is to double this by 2030. Solar energy and wind energy are competitive now. The only problem is that they are not *storable*. That is a huge challenge."

The second European Expert, Dr. Groebel, proceeded to talk about **Integrating renewables in the grid and the market: Insights from the German *Energiewende* and lessons learnt**. Her presentation shed light on the transformation of Germany's energy grid to greater sustainable and renewable energy reliance. Since the enactment of *Energiewende*, several solutions and reforms have been enacted. These include the Grid Acceleration Act, Renewables growth and reform of the Renewable Energy Act, and Amendments to the Energy Industry Act: the Electricity Market Design Act (EOM 2.0).

Dr. Groebel articulated for sustainable energy expansion to continue to grow in Germany, there needs to be stable regulatory framework to ensure investor confidence. Moreover, she called for a hands-off market based approach. And the Internal Energy Market must realize cross-

border benefits e.g., market coupling and security of supply.

In the context of the European Union, a notable challenge is Eastern Europe. "Their infrastructure is under invested. Some of their grids are still on the frequency of Moscow. In Poland, for example, "they say, first we use our coal and then we move onto newer technologies." Dr. Groebel hopes Central and Eastern states realize the financial benefits to moving toward renewable resources.

Incentives are available for those electing to do so. "The European commission has special funding for projects of common interest to reinforce cross border capacity and infrastructure advancement." Last, Dr. Groebel, hopes other EU Member States reformulate their energy grids and look to Germany to avoid the same mistakes it made early on.

Afterwards, Mr. Downing discussed **Renewable Energy: The Future of Biofuels**. From a legal lens, Mr. Downing's very insightful presentation discussed Mexico's regulatory framework concerning bio-energy and sustainable rural development. Looking at ethanol and biodiesel, Mr. Downing found while there is potential, usage remains limited. In part, this is because there are few production facilities. And, blended gasoline and ethanol usage is restricted in

major population areas: Mexico City, Monterrey and Guadalajara.

Mexico relies heavily on the fossil fuels. But, by 2025, Mexican energy reform set a goal of producing 35 percent of its domestic energy from renewable resources. Given most renewable energy technologies are produced elsewhere, Mr. Downing also underscored potential gains for future investors exporting renewable technologies to the Mexican market.

Lastly, Dr. Philippidis presented **Advanced Biofuels**. He and his research team study the utility of algae and bio-fuels. "I think most of the algae work is done in the US." The use of algae has been tested for several outputs. One in particular is for jet-fuel.

"The aviation sector is a very good example. It doesn't matter where you are based, everything effects everything else. We have developed a new system to lower the costs of the cultivation of algae, outdoors, and we are trying to pitch it. So far, we have approached South African Airlines and Lufthansa. Presently, the vast majority of the fuel being tested will come from vegetable oil, so it will be mostly first generation. One problem with first generation production is they need land to grow. Renewable energy production and usage is growing slowly. But, due to the sup-





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## EU Jean Monnet Project

### "Renewable Energies and Biofuels"

Workshop at Greenberg-Traurig 1/20/2017



From left to right: Dr. Arif Sarwat, Dr. George Philippidis, Dr. Annegret Groebel, Robert Downing, Alexandre Wagner, and Dr. Edward Glab

pression of the cost of oil, the major issue is cost." Expanding from his analysis of the airline industry, Dr. Philippidis discussed what this means at the political level.

"In Europe, the politics of carbon transcend political affiliations, as supposed to here, where it remains bipartisan. That gives me hope, maybe eventually we will see that here. For example, right in Miami you have the example of the rising sea level. It is bringing republicans and democrats together. It is everybody's livelihood. I think it presents an example where politics will be "trumped" by the realization of the effect of global warming. Overall, I think there are a lot of indicators that [environmental degradation and the need to transition to more sustainable energy resources] is becoming more of a private sector issue. To an extent, it will be irrelevant what Washington or Tallahassee thinks because this is their money, this is their shareholders."

The workshops were a success. More than 70 guests from Miami-Dade County attended the workshop. The target audience consisted of community members at large, renewable energy company CEOs, European Consuls General and Deputy Consuls

General, executive directors and members of European Chambers of Commerce and Miami Dade County—Office of Resilience representatives. We were honored to have the presence of Hon. Susan Harper, Consul General of Canada; Francisco De La Lama, Deputy Consul General of Mexico; Axel Zeissig, Vice Consul of Germany; Tomas Abreu, Honorary Consul of the Principality of Monaco; Dr. Volker Anding, (ret.) German Ambassador; Stephanie Menaud-Gougain, Head of Public Affairs Department, Consulate General of France; and Barbara Staal, Senior Commercial Officer, Consulate General of the Kingdom of the Netherlands. The Miami-Florida Jean Monnet Center of Excellence would like to sincerely thank our co-sponsor Greenberg Traurig, especially Mr. Antonio Pena and his team; Mr. Robert Downing, Shareholder, Greenberg Traurig, P.A., Houston and Miami; and all the European chambers of commerce executive directors and presidents for making this event a success.

- To view pictures, [click here](#)
- To watch video, [click here](#)

By Jeff Maslanik & Christine. I. Caly-Sanchez



#### Annegret Groebel

Head of Department International Relations/Postal Regulation, BZnetZ (Bundesnetzagentur), Federal Network Agency, Germany + Vice President, CEER (Council of European Energy Regulators)



Dr. Annegret Groebel has studied economics at the University of Heidelberg and Paris-Dauphine and was a researcher at the University of Mannheim where she also got her doctorate in 1996.

Dr. Groebel has worked for the German Regulatory Authority for Telecommunications and Post since 1997 (renamed in 2005 to Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway). Dr. Groebel has held the post of Head of Section "International Co-ordination" in the German Regulatory Authority for Telecommunications and Post since 2001 and was promoted Head of Department International Relations/Postal Regulation in 2009.

She also holds key positions at the Independent Regulators Group (IRG). She is actively involved in the work of the European Regulators Group (ERG) and of the newly created Body of European Regulators for Electronic Communications (BEREC). She is responsible for all contacts to other European and non-European regulatory bodies as well as for the contacts with the European Commission, including CEER, ACER in the energy field, ERG-Post and IRG Railways.

In March 2012, she was appointed Vice-President of the Council of European Energy Regulators (CEER) and became the alternate member of the [ACER](#) Board of Regulators representing BNetzA at the BoR Plenary meetings.

Since August 2013 she is co-chairing the Market Integrity and Transparency Working Groups of ACER and CEER. In November 2013 she was appointed to be a member of the NER Bureau supporting the NER Chair Luigi Carbone (AEEGSI). She has expertise in the European regulatory framework for electronic communications and implementation, as well as the regulatory framework for the internal energy market and is lecturing at universities in Germany, the FSR in Italy, and Switzerland. She has advised public authorities on regulatory reform and sector specific regulation. The Bundesnetzagentur The Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway, or [Bundesnetzagentur](#) as it is commonly known, is the German regulator for electricity, gas, telecommunications, post and railway. It promotes effective competition in the regulated areas and ensures non-discriminatory access to networks. It protects important consumer rights and is also the root certification authority under the Electronic Signatures Act. In addition, the Bundesnetzagentur is responsible for implementing the Grid Expansion Acceleration Act.



## EU Jean Monnet Project "Renewable Energies and Biofuels Lessons from Transatlantic Experiences" 1/20/2017



**Dr. Annegret Groebel**  
Head of Dept. International Relations, BZnetzA

**Alexandre Wagner**  
Senior Project Manager, ADEME



**Dr. Annegret Groebel**  
Head of Dept. International Relations, BZnetzA



Panelists, organizers and European chambers of commerce executive directors



Alexandre Wagner



Dr. Philippidis, Dr. Glab, Hon. Susan Harper, Christine Caly-Sanchez, and Margaret Cullen

- For more information on the event, [click here](#)
- For bios, [click here](#)
- For morning pictures, [click here](#)
- For Luncheon pictures, [click here](#)
- To watch video, [click here](#)
- To view PowerPoint Presentations, click on each presentation hereafter:
  - Dr. Annegret Groebel, [click here](#)
  - Dr. Alexandre Wagner, [click here](#)
  - Mr. Robert Downing, [click here](#)
- For more information on FIU FPL Solar research facility, [click here](#)







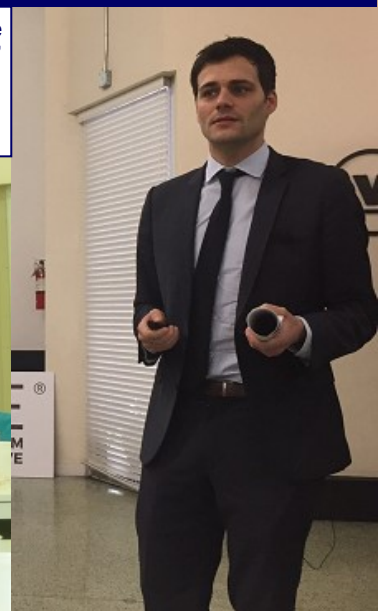
## EU Jean Monnet Project "Renewable Energies: The French and European Innovative Projects through the Investments Program for the Future " Workshop - 1/19/2017

**VENTURE HIVE™**


From left to right: Alexandre Wagner, Senior Project Manager, ADEME; Pascale Villet, Executive Director, FACC; Christine I. Caly-Sanchez, Project Manager/Associate Director, MFJMCE; Alex Zeissig, Vice Consul of Germany

**Alexandre Wagner, Senior Project Manager, ADEME, made a presentation** on "the French and European Innovative Projects through the Investments Program for the Future" to the French American Chamber of Commerce Florida members at Venture Hive on January 19th.

► To view flyer, PPT, pictures [click here](#)



Alexandre Wagner





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## EU Jean Monnet Project—Visit and Meeting at FIU College of Engineering & Computing



Engineering  
& Computing

FPL Solar Research Center facilities - The International Hurricane Research Center  
Wall of Wind— 01/20/2017



Alexandre Wagner at the FIU Engineering Center



FPL Solar Research—Advancing affordable clean energy  
at FIU College of Engineering & Computing



FIU International Hurricane Research Center "Wall of Wind"



FIU Energy, Power, and Sustainability Lab



From left to right: Christine Caly-Sanchez, Alexandre Wagner, Dr. Annegret Groebel, Dr. Leonel Lagos, Birgitta Rausch-Montoto, Axel Zeissig, Dr. Arif Sarwat, Dr. Anthony Mc Goron, Dr. Michael Sukop