

4<sup>th</sup> International Conference on  
**GREEN ENERGY & EXPO**  
&

6<sup>th</sup> International Conference on  
**RECYCLING: REDUCE, REUSE & RECYCLE** November 06-08, 2017 | Las Vegas, USA

---

## **Palm oil extraction- a revolutionary technology**

**José Marques**  
IncBio, Portugal

**O**il extraction efficiency is the percentage of oil extracted from the total oil available in the total mass, of any feedstock. In the soybean oil industry, efficiency is approximately 95%. In the rapeseed industry, efficiency is approximately 98.5%. In the palm oil industry, efficiency is close to 50%! It is, without a question, the industry with the worst Oil Extraction Efficiency of any oil industry and it represents an unbelievable waste, which has taken a big toll on the environment. With the increase of demand of palm oil in the last decade, for many different industries, the industry has been focusing on plantations, cutting or burning tropical forests, to produce more palm oil. But efficiencies have only marginally increased. IncBio's technology has been under development for more than 5 years and it has been industrially implemented for 2 years. After the first year of learning from issues that were not expected, the plant has been running for a year with and OER (Oil Extraction Rate) above 25%, when the national average for Malaysia is 20.1%. This represents an Oil Extraction Efficiency of 62.5%, or an increase of 25% over the current technology. While there is still a lot of possibilities for growth, this represents a major step in an industry that is known for hurting the environment. This can actually increase palm oil production by 25%, maintaining the same plantations, without cutting or burning any more trees.

### **Biography**

José Marques is the CEO of IncBio following a course in Economics, in the Faculty of Economics in the University of Porto and after working in two different sectors, he created IncBio in 2006. Focusing on sustainability, his work has been mostly on recycled feedstock. To achieve the best results, he concentrated IncBio's work in new technologies, using solid catalyst, dry wash resins and mainly Ultrasonic Reactors.

josemarques@incbio.com

### **Notes:**