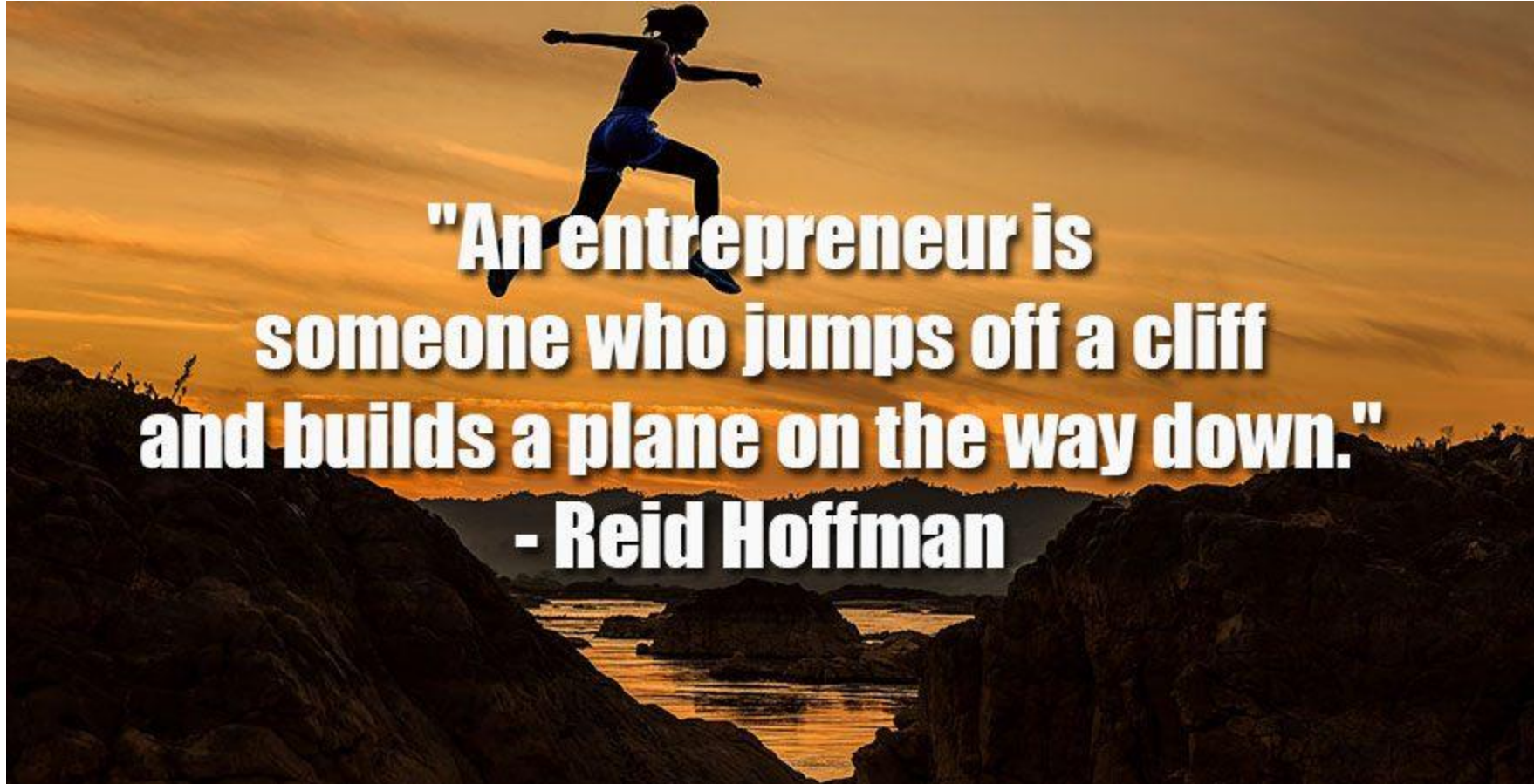


# About me

- Portuguese & Brazilian, married, 3 teenagers
- Physics PhD (MPI, Potsdam), postdoc at UCSB
- BASF (2003-2016)
  - R&D, BVC, product management, business development (Hong Kong), BVC
- CEO Novihum Technologies (since 2017)





**"An entrepreneur is  
someone who jumps off a cliff  
and builds a plane on the way down."  
- Reid Hoffman**

# Novihum Technologies tackles global soil issues

## Global key issue: farmers all over the world are struggling with loss of soil fertility

- There are globally millions of hectares of agricultural land in areas with light, tired, low-performing soil
- Modern agricultural practices and climate change contribute to increase loss of topsoil, lower nutrient and moisture retention → lower soil fertility
- Farmers often must increase inputs, or even stop using patches in their farms, because of low productivity

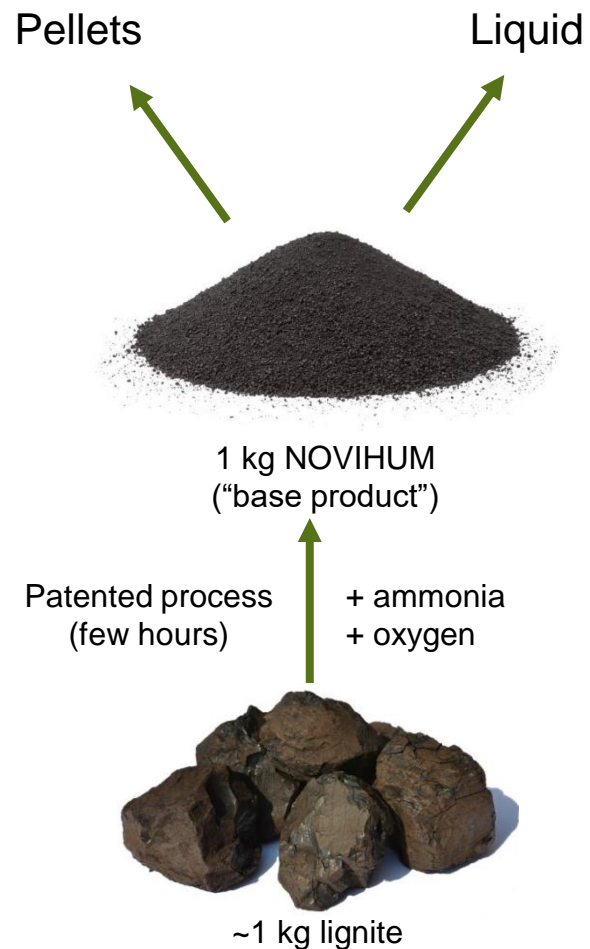


## Solution: NOVIHUM uniquely restores soils health and increases yields

- NOVIHUM® is the next generation humic material
- Restores and improves soil's health immediately
- More resilient and stronger plants
- No leaching, no plastics, no pathogens, no sodium
- Remains active and lasts longer than any other source of organic matter, no need to re-apply every year



# NOVIHUM: chemically-modified lignite



- Virtually endless raw material availability
- Cradle-to-gate CO<sub>2</sub> much lower than existing chemical fertilizers
- Current production capacity in Dortmund
  - Pure NOVIHUM powder: 1,000 tons/year
  - Pelletized formulations: 5,000 tons/year
  - Liquid: under development

# Lessons learned (thus far)

- In a “big corp”, there is always an excuse... in a startup, it is on you!
- It is always a rollercoaster– no exceptions, no shortcuts
- You need tenacity, fortitude, grit...
- ...and you must know when to stop/change/pivot things that are not working or need improving
- You will need much more time and much more cash than you think – live with it!
- Finally: be prepared for the worse, work hard for the best

- Keep in mind
  - Teamwork is key: both within the company as well as with shareholders, other stakeholders
  - Manage yourself and your emotions
  - Stay flexible, don't be afraid of looking silly, be focused
    - When you are successful, all negatives will be forgotten; if you fail, it doesn't really matter how well you planned and executed