



# CFA Institute

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## CFA Institute Research Challenge

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TICKER: ADMIE: GA

SECTOR: Utilities – TSO

CURRENT PRICE: € 2.48 (as of 24/1/2020)

DATE: 1/2/2020

Recommendation: BUY (upside 36.26%)

Target Price: € 3.38

**Figure 1 : Snapshot**

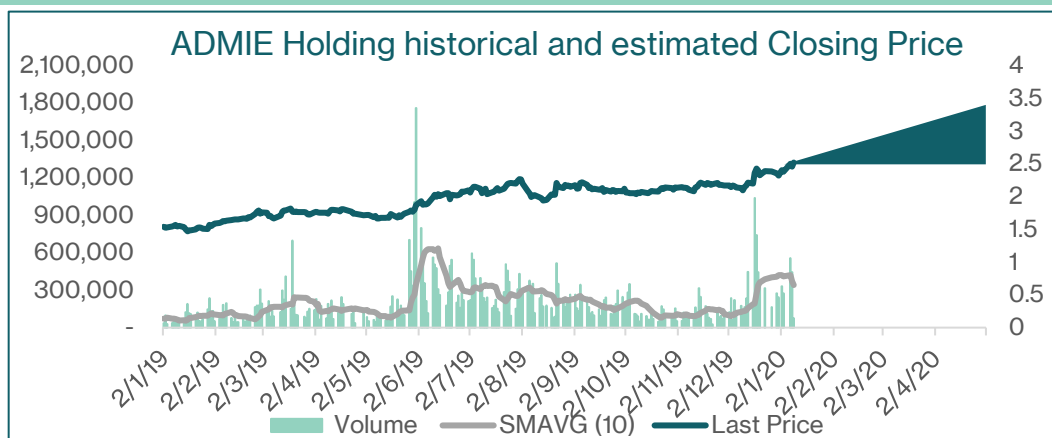
Market Snapshot	
Ticker	ADMIE:GA
Shares Outstanding	232 MM
Market Cap(€ in 000s)	557 MM
52 Week Low (€)	1.46
52 Week High(€)	2.55
Free Float(%)	49.00
Average Daily Volume(52week)	208 MM

Source: Bloomberg, Team Analysis

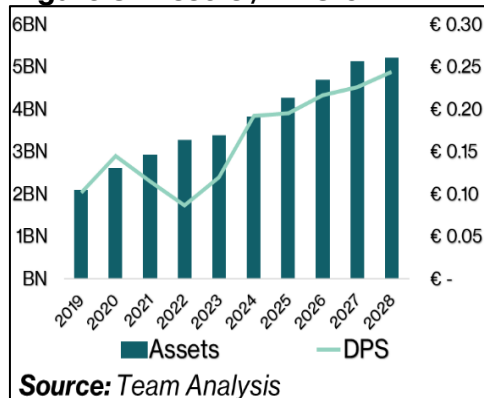
**Figure 2 : Methodologies**

Methodologies	Price per Share	Weighting
RAB	€ 3.25	40%
DDM	€ 3.42	40%
DCF	€ 3.15	10%
Multiples	€ 3.97	10%
Average	€ 3.38	

Source: Team Analysis



**Figure 3 : Assets / DPS Grth**



## INVESTMENT CASE

ADMIE Holding owns a 51% stake in the Independent Power Transmission Operator (IPTO SA), the Transmission System Operator (TSO) of Hellenic Electricity. Therefore, IPTO's financials are directly reflected on ADMIE Holding's value. We issue a BUY recommendation on ADMIE Holding SA with a target price of € 3.38/sh., presenting a 36.26% upside potential on the closing price of € 2.48/sh. on January 24<sup>th</sup>. Our valuation is based primarily on 40% RAB Method and 40% on Dividend Discount Model. It also weighs in 10% Discounted Free Cash Flows to the Firm and 10% Multiples Valuation using P/E & EV/EBITDA ratios. Our proposition relies on the following key pillars: 1) High dividends' yield 2) Resilient profitability driven by asset expansion 3) Low risk exposure.

## KEY DRIVERS

Fueled by the heavy Investment Plan of 2019-2028, IPTO's tangible assets are anticipated to grow 3.1x times in value by 2028. Therefore, due to RAE's remuneration methodology (more information on § IPTO's Revenue), we expect revenues to grow at a steep rate of 9.75% (CAGR '19e – '28f, Figure 4). We forecasted that this will translate into an avg. 34.56% Net Profit Margin. The improvement in profitability will be passed to ADMIEH's shareholders through increased DPS within the following decade (10.2% CAGR '19e – '28f). Consequently, this income effect will yield an average of c 6.63%, (Figure 4) in the 10-year period, bettering 2019's 4.11%.

## FINANCIALS

The company is expected to use leverage as part of its funding mix to support future CapEx (avg D/(D+E) 54.74%, Figure 4), being however, strictly below the regulator's cap of 70%. Furthermore, we believe IPTO, as a value creator, will be able to service the necessary loans, as shown by the expected avg 135 bp RoIC-WACC spread. Lastly, the company's expected liquidity (avg 1.70 current ratio) further supports leverage in the short term (Appendix 10 – Fin. Ratios).

## RISKS

The most significant risks threatening IPTO are its negative FCF's (Appendix 15 – DCF Model) during the '19-'28 Investment Plan –sided by dividend payouts-, its dependency on RAE (Appendix 27 – Market Operators) and its low score Governance Assessment by international outlets (Appendix 36 – IPTO Governance Assessment).

**Figure 4 : Key Figures**

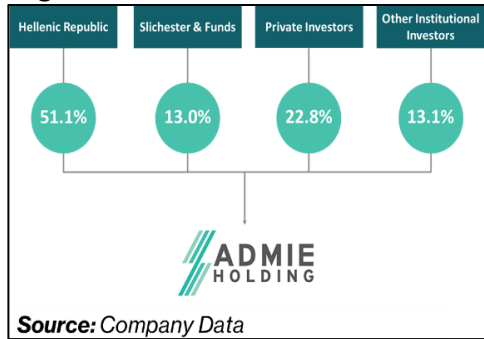
Key Ratios	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	CAGR
% Grth Assets	22.6%	25.6%	12.2%	11.8%	3.6%	12.9%	11.8%	9.8%	9.7%	1.5%	11.9%
% Grth Revenues	5.3%	22.2%	4.1%	-11.8%	17.8%	30.9%	10.2%	10.6%	6.0%	7.5%	9.8%
% Grth EPS	8.0%	42.4%	-20.5%	-24.7%	37.7%	61.0%	1.4%	10.9%	4.4%	8.1%	10.0%
DPS in €	0.10	0.15	0.12	0.09	0.12	0.19	0.20	0.22	0.23	0.24	10.0%
<b>Dividend Yield*</b>	4.1%	5.9%	4.7%	3.5%	4.8%	7.8%	7.9%	8.7%	9.1%	9.8%	6.6%
<b>P/E*</b>	12.16	8.54	10.75	14.28	10.37	6.44	6.35	5.73	5.49	5.08	8.52
<b>EBITDA Margin</b>	70.9%	74.2%	75.1%	73.6%	73.5%	82.8%	84.4%	85.9%	86.6%	87.5%	79.4%
<b>RoE</b>	8.6%	11.3%	8.7%	6.4%	8.4%	12.3%	11.8%	12.2%	11.9%	12.1%	10.4%
<b>Net Debt/EBITDA</b>	1.30	3.52	4.65	5.63	4.78	4.04	4.20	4.16	4.34	4.06	4.07
<b>D/(D+E)</b>	43.0%	51.6%	54.7%	56.5%	55.3%	55.9%	57.4%	57.8%	58.4%	56.8%	54.7%

\*Assumes price remaining stable

Source: IPTO's Financial Statements, Bloomberg, Team Analysis

## BUSINESS DESCRIPTION

**Figure 5 : ADMIEH's Structure**

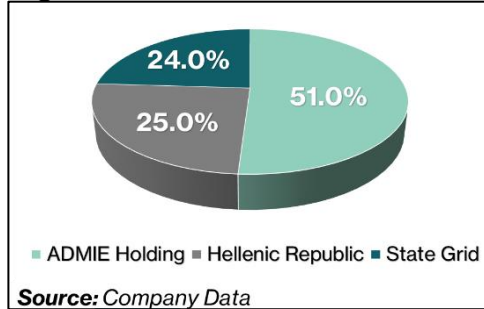


ADMIE Holding SA (ADMIEH or Company hereafter) was established in 2017 as a Quasi-Public Company owning a sole asset in its portfolio, its 51% stake on IPTO. The Greek State controls 51% of Company's stocks, while the rest trade on the Athens Stock Exchange (Figure 5). ADMIE Holding S.A. acts on behalf of its shareholders' interests by supervising IPTO and ensuring the proper execution of IPTO's responsibilities. IPTO is one of the European Transmission System Operators of Electricity (ENTSO-E) and as such its responsibilities include, but are not limited to, the following: Granting access to the System to all relevant parties, managing electricity flows in the System, providing data to System users and clearing of generation-demand imbalances.

### PARTIAL OWNERSHIP AND SUPERVISION

Once a part of Public Power Company (PPC), IPTO is now an independent organization jointly governed by ADMIE Holding S.A (Figure 6), the strategic investor State Grid Corporation of China (24%) and the Greek State (25% but indirectly totals 51%). Since ADMIE Holding's performance is 100% dependent on IPTO's activities, our analysis focuses primarily on IPTO's position and potential in its relevant sector. Ultimately, IPTO's fundamentals and development in the upcoming years will be reflected on ADMIE Holding's financial results.

**Figure 6 : IPTO's Structure**



### GREEK ELECTRICITY GRID AND OPERATORS

The procedure of electricity transmission to the final consumer provides enlightening information about IPTO's position and correlation with the electricity market. First, the power plants generate electricity via fossil fuels, Renewable Energy Sources (RES) and others. Through the Daily Energy Planning, IPTO and the Hellenic Electricity Market Operator (HEMO) are cooperating to balance Supply and Demand in the intraday electricity stream. Afterwards, IPTO is transforming the current initially to 400kV and, through the High Voltage Centers (HVC), once again to 150kV, reaching high voltage consumers, high voltage substations as well as medium voltage centers and consumers. Finally, it is the Distribution Network Operator's responsibility (HEDNO) to allocate electricity to low voltage consumers. (Appendix 18 – Market Operators).

**Figure 7 : AR Calculation**

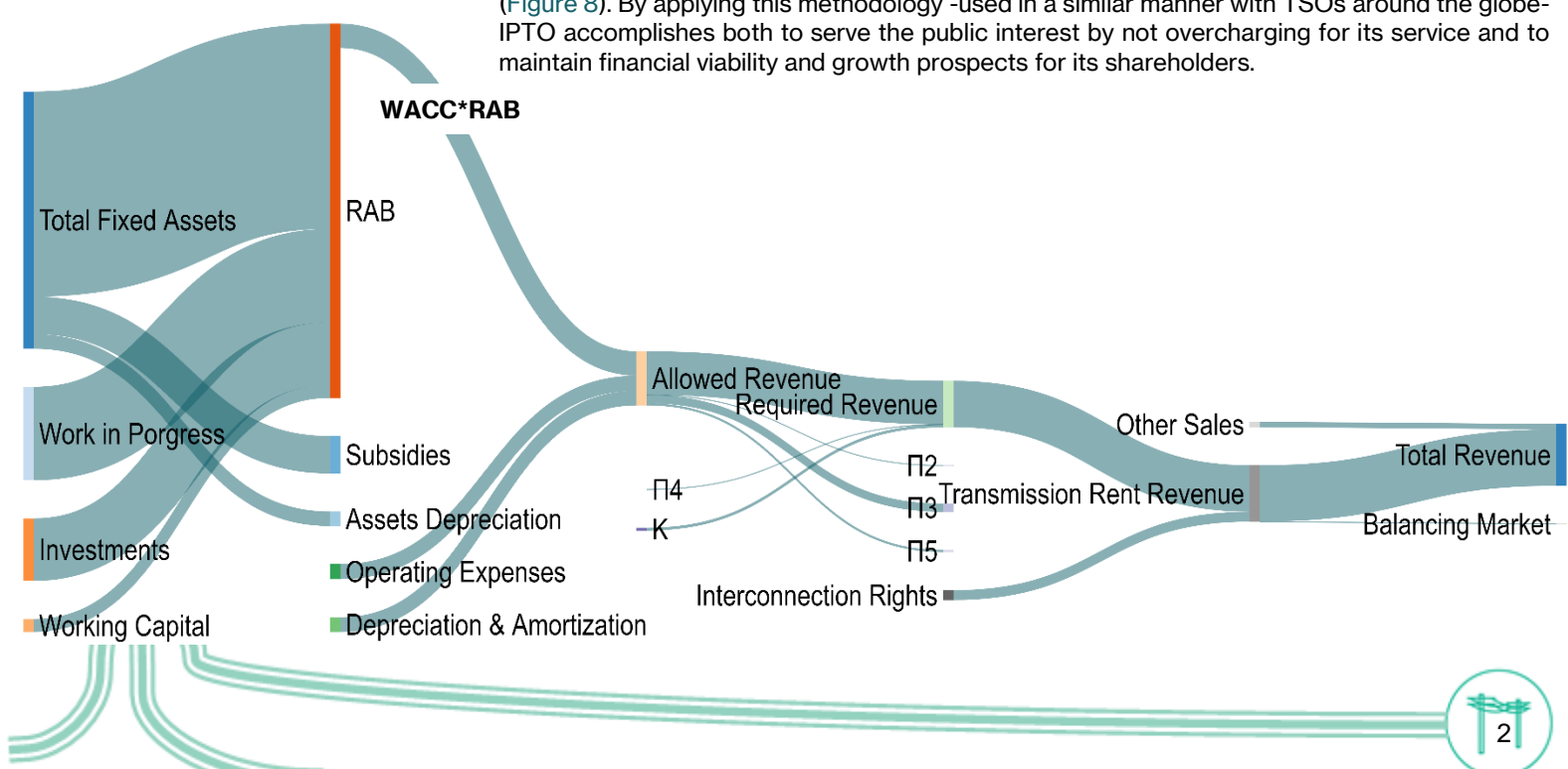
Allowed Revenue '20 Calculation		In €
(+)Operating Expenses(OpEx)	78,461,000	
(+)Depreciation(Dep)	76,370,000	
Regulated Asset Base(RAB)	1,941,335,000	
WACC	6.50%	
(+)Return on RAB: R= RAB* Wacc	126,187,000	
(-)Allowed Revenue	281,018,000	

Source: Team Analysis

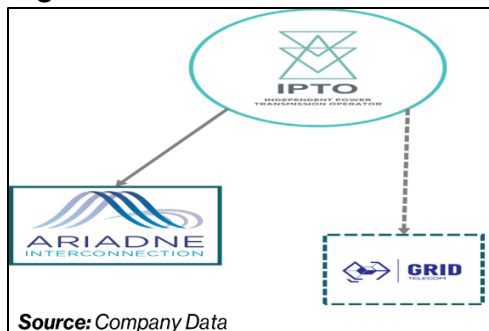
### IPTO'S REVENUE: A REMUNERATION FOR THE COMPANY'S INVESTMENTS

Since IPTO is a semi-public TSO, its revenue generation does not derive from the product of price and quantity sold. Instead, it is a form of compensation for IPTO's Regulated Asset Base, Expenses and Investments (further analysis in Financial Analysis and Valuation segments). In the beginning of the 4-year regulatory period (present: '18-'21) the Regulatory Authority for Energy calculates IPTO's Allowed Revenue (Figure 7) by estimating each year's components -which remain unchanged for the duration of the 4year period-. AR represents a soft cap for IPTO's System Rent. The floor of IPTO's revenues, the Required Revenue - which is distributed to the consumers proportionally - is calculated on a yearly basis by adjusting AR for previous years' discrepancies. Adding income from interconnection rights (to producers from neighboring countries that wish to connect with the Greek System) to RR forms the Transmission System Revenue which, after the inclusion of total sales, constitutes the company's Total Revenue (Figure 8). By applying this methodology -used in a similar manner with TSOs around the globe- IPTO accomplishes both to serve the public interest by not overcharging for its service and to maintain financial viability and growth prospects for its shareholders.

**Figure 8 : RAB → Total Revenues**



**Figure 9 : IPTO's Two Subsidiaries**



Source: Company Data

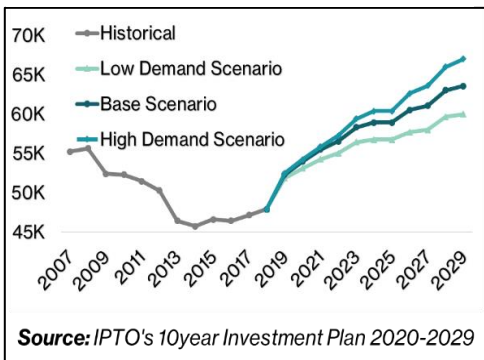
**IPTO'S TWO SUBSIDIARIES: ARIADNE INTERCONNECTION & GRID TELECOM**

IPTO established two subsidiaries in the recent years (Figure 9), creating pathways for synergies and diversification (Appendix 23 – SWOT Analysis). The first one, Ariadne Interconnection, was established in September 2018 and is a Special Purpose Vehicle tasked with the interconnection of Crete with Attica. It was created for two main reasons, for allowing third parties to participate by directly injecting capital and for compartmentalizing the income stream, as IPTO agreed to incorporate this project to its RAB solely after its electrification in exchange for a premium in WACC (1.0-2.5%). The second, Grid Telecom, a 100% subsidiary company of IPTO, was established in January 2019. Through Grid, IPTO is aiming to provide telecommunication services to (inter)national providers, by taking advantage of its extended cable infrastructure as well as its prospect reach in remote areas, such as Crete and Dodecanese (A deal with WIND Hellas for optical fiber pairs leasing in mainland Greece was recently signed). These services can provide IPTO a substantial source of diversifiable revenue (Figure 10), which will be unregulated by RAE unlike System Rent, thus making higher profit margins plausible (Telecommunication equipment- 5year EPS CAGR:17.2% Source: NYU Stern). However, Grid's opportunities and risks are not currently pertinent to our valuation due its pre-alpha state.

**Figure 10 : Grid Telecom**

Project	Opportunity
<b>Telecommunication Interface with Balkan TSOs</b>	The Regional Security Coordinator (entity tasked with assisting in the task of maintaining operational security across borders) will be built in Thessaloniki. With the upcoming telecommunication interface of IPTO with the Balkan TSOs, Grid Telecom is given a unique opportunity to expand its network out of borders.
<b>Telecommunication Interface of mainland Greece with islands</b>	With each island's electricity interface Grid may simultaneously provide superfast broadband services to these regions. Additionally, Grid can use IPTO's High Voltage Pylons for antenna installations used by mobile telecommunication companies.
<b>Ultra-Fast Broadband project</b>	The Ultra-Fast Broadband project will be a public-private partnership aiming to expand broadband services in regions excluded by the Rural Broadband and Superfast Broadband projects. It is yet another market in which Grid can exploit IPTO's expertise and infrastructure to provide telecommunication services.

**Figure 11 : Energy Demand in MWh transferred through NETS**



Source: IPTO's 10year Investment Plan 2020-2029

**INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING**

Adding to the necessity of electricity transportation for modern societies, the Greek State aims to alter the country's energy mixture in order to meet EU's environmental goals for 2030 and beyond, making IPTO's operation and expansion more relevant than ever. Coupled with the rising demand for energy to be moved through the System (1.54% YoY in base scenario, Figure 11) and the Greek islands' connection projects, IPTO's position both in time and in the market is deemed crucial.

**EU POLICY & THE GREEK NATIONAL PLAN FOR ENERGY AND CLIMATE (NPEC)**

Since Greece has complied with EU's policy regarding energy and environmental matters, the country's energy landscape is undergoing a variety of changes, in order to achieve the national goals for 2030 that include: greater participation of RES in domestic energy consumption, liberalization of energy markets and increased competitiveness, greenhouse gas emissions reduction (55% less than 2005, Figure 12) to name a few. These goals are reflected to the Hellenic Republic's recent commitments -through NPEC's publication- to de-carbonize PPC and the electricity mixture in general (fully until 2028), the foundation of Energy Exchange, IPTO's system expansion and more. As described the National Plan for Energy and Climate (NPEC), more than 43.8bn euros will be invested in energy infrastructure, most notably 11bn in energy efficiency projects, 9 bn in RES and 5.5bn in transmission grid development (Figure 14).

**DOMESTIC ELECTRICITY MARKET: CONVERGENCE WITH SEE**

Greece's energy sector expects the abolishment of the Mandatory Pool in favor of the Target model by mid-2020. Under the Mandatory Pool's regime, all participants in the electricity market receive (or pay) the System Marginal Price, leaving miniscule margin for competition. However, this will change with the operation of the Energy Exchange and the introduction of the "Target Model" (Figure 13). The Energy Exchange, operating under RAE's supervision, aims at restructuring the wholesale electricity market through: The conjunction of the Greek market with the rest European Markets, reinforcement of competition, energy security and diversification of the energy consumption mixture. The first step towards achieving aforementioned goals is the "Target Model", which will introduce four new energy markets: 1) Forward market 2) Intraday Market 3) Day-Ahead Market 4) Balancing Market (Appendices 29&30 – Electricity Grid & Market Framework after Target Model). The first three will be HEMO's responsibility, while the fourth will be IPTO's. Under these circumstances Greece's market will be unified with the rest of Europe (with similar efforts from the rest South Eastern European -SEE- countries), coupling

**Figure 12 : NPEC Goals**

NPEC Goal description	Greece's commitment	European Target
<b>Greenhouse Gas emissions reduction(in contrast to 2005)</b>	55%	
<b>Renewable Energy Sources participation in final energy consumption</b>	35%	32%
<b>Energy efficiency improvement to 2030</b>	38%	32.50%
<b>De-carbonization of electricity production</b>	Full until 2028	
<b>Obviation of Greek Islands Isolation</b>	Full until 2029	

Source: NPEC 2019

**Figure 13 : Target Model**

Target Model Goals
Lower prices for consumers
Development of competition in wholesale and retail
Efficient utilization of interconnections
Risk hedging by market participants
Easier fulfillment of legal obligations
Security of supply both on physical and economic terms

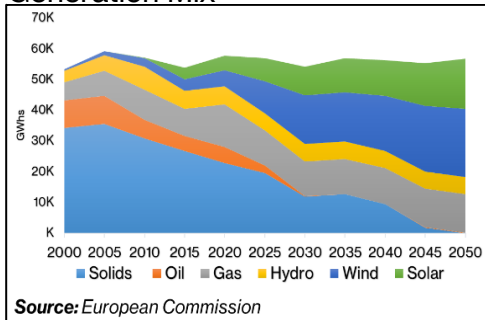
Source: RAE, EU Commission

**Figure 14 : NPEC Subsidies**

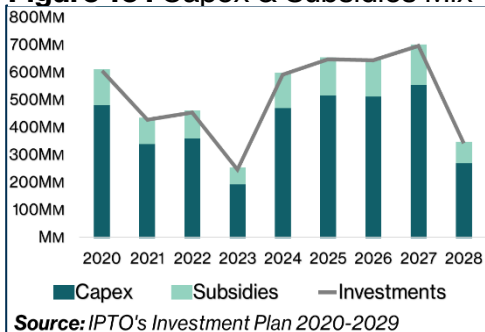
NPEC's Subsidies per Project/Sector	in €
RES for electricity production	9 bn
Electricity System Infrastructure	5.5 bn
New thermal units and energy storage	1.3 bn
Electricity Distribution-Digitalization	3.5 bn
Natural Gas Transmission	2.2 bn
Natural Gas Distribution	2 bn
Research and Development	0.8 bn
Energy Efficiency	11 bn
Refineries	1.5 bn
Climate Change-Forests and Floods	2 bn
Cyclical Economy	5 bn
<b>Total</b>	<b>43.8 bn</b>

Source: NPEC 2019

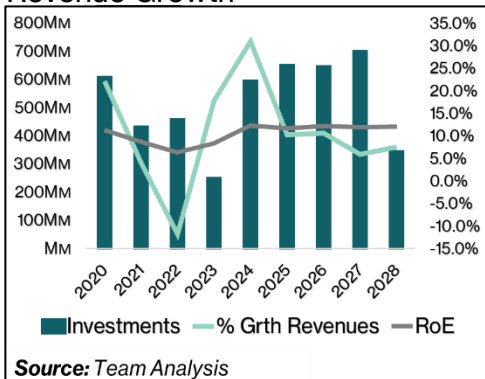
**Figure 15 : Greece's Electricity Generation Mix**



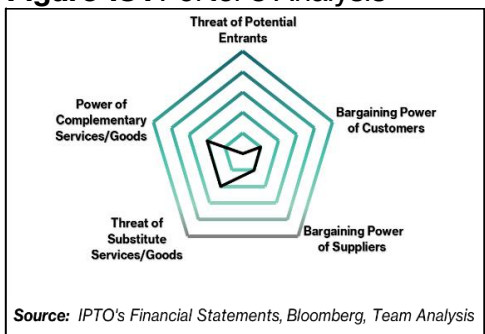
**Figure 16 : Capex & Subsidies Mix**



**Figure 17 : Capitalization of Revenue Growth**



**Figure 18 : Porter's Analysis**



electricity prices across the EU, reducing the price for Greek consumers and increasing energy security.

**ELECTRICITY'S CALIBER EXPECTED TO RISE IN THE FOLLOWING YEARS**

The current incumbent administration aims to drastically change the Country's energy mixture and expand the transportation & distribution networks (Appendix 21 – PEST Analysis). These changes are driven by electricity's growing importance in the following years, as the electrification of heating, cooling and transportation (electric cars amount around 24-30% in NPEC's scenarios) will offset the inevitable reduction of fossil fuels usage. Additionally, the Renewable Energy Sources are all "translated" in electricity production and the need for RES's increased participation in the Energy Mixture (Figure 15) will have substantial impact in IPTO's development, as further grid expansion is deemed necessary. IPTO is constantly researching Greece's power needs and incorporates projects to cover them in its Investment Plan, which evolves on a yearly basis. Combining new technologies with its expertise and entering new markets (Appendix 23 – SWOT Analysis) is a key factor that will drive IPTO's growth even after Greece has been fully interconnected.

**COMPETITIVE POSITIONING**

The main operating activity of IPTO is shielded from competition (Appendix 22 – Porter's 5 Forces Analysis), but also restricted from high profit margins in favor of the public interest. Due to its unique position, service and remuneration methodology, IPTO has low correlation with the energy market and the economy in general. Additionally, energy demand affects its revenues only indirectly, through the need for upgrades in grid capacity (take into account in IPTO's Investment Plan). However, as both markets encounter a supposedly reforming decade, IPTO's strategic positioning coupled with rapid growth (metric needed) will boost the company's financial performance even higher (Appendix 11 – DuPont Analysis). More specifically, excess returns will derive primarily through risen demand in 3 key areas: interconnection rights, network participation requests and infrastructure to conform with higher needs for alternative energy sources.

**INVESTMENT SUMMARY**

By our analysis an implied fair value of € 3.38/sh., was extracted, representing a 36.26% upside from ADMIEH's closing price of € 2.48/sh. on January 24<sup>th</sup>. Each methodology (40% RAB, 40% DDM, 10% DCF & 10% Multiples) encapsulated, through the Net Adjusted Value, the expected growth of ADMIE Holding's affiliation. This proposition can be appropriately reflected on the following analysis of IPTO's growth drivers and key financials.

**ADMIEH's SINGLE ASSET: A VALUE COMPANY WITH GROWTH PROSPECT**

The new decade can be summarized by IPTO fulfilling a long-standing project: connecting the vast majority of Greek islands with Greek mainland's electricity transmission system. This task is expected to be actualized through a heavy Investment Plan (c € 5.1 bn/10y), providing ADMIE Holding and its shareholders the opportunity to capitalize on the investment-rewarding income approach of IPTO (revenues +9.75% CAGR '19 – '28, Figure 17), while preserving its social objective. In contrast to the risks that companies face during large Capex periods, IPTO's monopoly and regulatory frame compose a goodwill that translates into robust capital gains (c 10% DPS CAGR '19e - '28e) for the foreseeable future. The aforementioned combination of asset expansion and low risk exposure along, with the expected dividends of this period, constitute the three main catalysts that support our proposition's premium and are better detailed below.

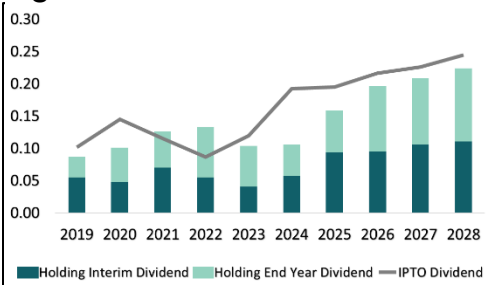
**ISLANDS' INTERCONNECTION & SYSTEM UPGRADE ERUPT ASSETS VALUE**

Greece's geomorphology impeded most islands' interconnection to the mainland's energy transmission system, driving up energy generation cost, as these islands relied on oil to produce electricity (Wholesale Electricity Price GR: 65.5€/MWh vs EU: 43.3€/MWh in 2019). The cost spread between the islands and the mainland was and still is distributed uniformly through Public Service Obligations (PSOs can reach c € 800 m), driving up each household's electricity bill. At the end of this decade the system will be covering land's larger part and there will be no further use for this price calibration. IPTO can and is expected to be rewarded for eliminating past charges without putting any extra burden to the citizens, whose electricity bill, if anything, will change downwards. Tangible assets are expected to reach 3.1x-current by 2028 (11.96% CAGR) driving up profitability (avg NPM 34.56% '19e – '28f) on account of the process detailed in the 4<sup>th</sup> § of Business Description.

**REGULATORY FRAMEWORK AND MANAGEMENT MITIGATE RISKS**

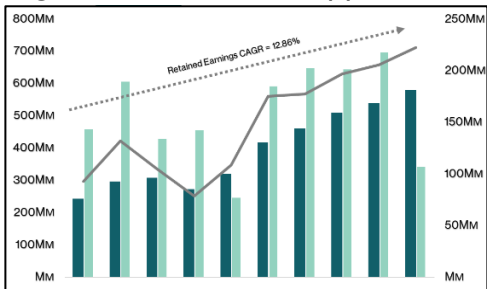
IPTO's independence from market forces, coupled with management's decisions on operating costs and cash management, can entice risk averse investors. ADMIEH's solidity has already been established by the regulatory framework, which sets protective barriers around IPTO (Appendix 22 – Porter's 5 Forces Analysis), secures revenue streams (Figure 37) and sets a

**Figure 19 : Dividends Realized vs Paid**



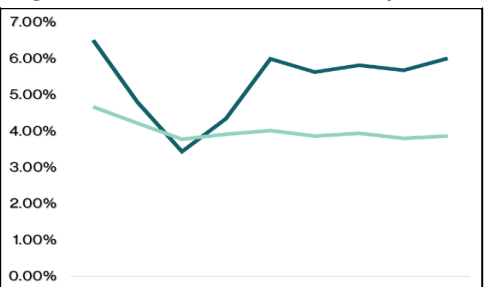
Source: Team Analysis

**Figure 20 : Revenues Appreciation**



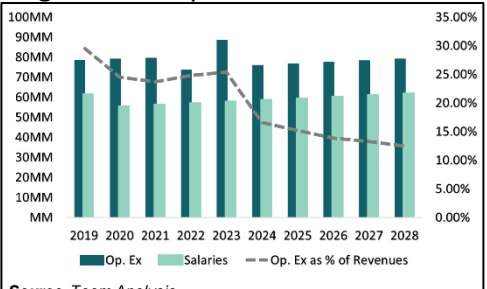
Source: Team Analysis

**Figure 21 : RoIC vs WACC Spread**



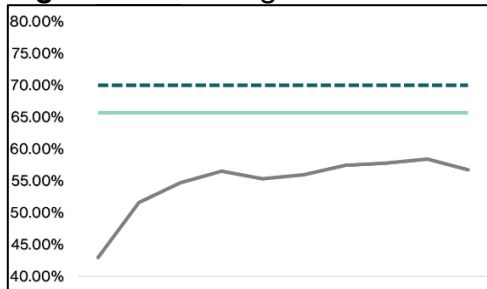
Source: Team Analysis

**Figure 22 : OpEx & Salaries' Trend**



Source: Team Analysis

**Figure 23 : Leverage**



Source: Team Analysis

prudent leverage policy (more on § Capital Structure). At the same time, management took action towards lowering costs while also increasing liquidity. The Voluntary Exit Scheme (VES) provides IPTO with solidity and room for improving efficiency (more on § Operating Expenses). Additionally, through IPTO's active cash management, even its most liquid asset yields above-average returns. IPTO's liquidity is further enhanced by the de facto stability of working capital, excluding cash, as its receivables are directly related with its payables, often totaling at zero. The latter changed after IPTO's independence, a trend that can be observed in its Beneish M-Score (Appendix 26). Hence, IPTO's definite low risk exposure (Appendix 24 – Risk Matrix) safeguards against the vulnerability its Investment Plan implies, shielding its expected growth.

**SHAREHOLDERS' RIGHT TO THE LION'S SHARE OF CUMMULATIVE RETURNS**

IPTO offers the stability and credibility of a partially State-owned Large Cap with a stable dividend policy (at least 50%, bound by law over 35%), which remunerates shareholders by seizing upon its amassed profits (EPS CAGR c 10% '19e – '28f). A reasonable accounting lag exists as the Company collects IPTO's dividend during the fiscal year that follows the earnings' period, and Holding's shareholders follow suit. In order to offset this delay of transferring dividends through 2 companies, the Company offers the maximum allowed interim dividend (Figure 19). This maximum permissible amount changed after January 1<sup>st</sup>, 2019 from 50% of temporary results to 50% of previous fiscal years' net realized gains. This loosened regulatory frame amplifies management's agility to distribute gains earlier than before.

**FINANCIAL ANALYSIS**

**REVENUE GROWTH REFLECTS RAPID INVESTMENT RETURNS' INTEGRATION**

Required revenues' collection from consumers allows IPTO's investments to yield returns faster than an average tangible asset does (Figure 20) This leads to a rather comprehensible rising trend in revenues with 2022f being the only exception as the new regulatory period is expected to be based on a lower WACC base. IPTO is able to capitalize on its confident operating margins (avg 49.33% '19e – '28f Appendix 10 – Financial Ratios) and favorable interest and tax conditions and reach a paramount retained earnings CAGR of 12.86% in the next decade.

**PROFITABILITY ANALYSIS: STRONG MARGINS OFFSET NEGATIVE CASH FLOWS**

IPTO faces a heavy CapEx period ahead that results in negative Free Cash Flows throughout the next decade (avg '19e - '28f FCFF: € -197,084.08 m, min € -389,830.94 m, Appendix 15 – DCF Model) posing company's sustainability in question. Supported by the regulated revenues and stable operating costs (-1.65% CAGR '19e – '28f), IPTO's EBITDA Margin soaring from 70.92% to 87.50% (confidently over peer's median 64.89% & avg 58.19%, Appendix 16 – Multiples Approach), counterbalances the previous conclusion. While short-term leverage trend (D/E forecasted increase: '19e 0.75 to '28f 1.31, Appendix 10 – Financial Ratios) contemplates the need for cash, IPTO's Net Income Margin avg 34.56% and the avg 1.34% spread between RoIC and WACC (Figure 21), further substantiate the estimated reverse in FCFFs' trend and in IPTO's cash and value generation.

**OPERATING EXPENSES: SALARIES & VOLUNTARY EXIT SCHEME**

IPTO's employees were proposed recently a voluntary exit in an effort to reduce operating costs while also driving down the average age of employees (junior hiring programs also took place). IPTO's personnel costs make up for the majority of IPTO's operating expenses (Figure 22) and the latest the programs have been signed for is the end of 2019. This usually depicts a slight spark in costs in the beginning of a decade, followed by a normalization of the trend afterwards. However, IPTO incorporated the expected lump sum cost of the exit program in the financial statements of 2018. Therefore, we anticipate the net effect in operating costs of the two programs to be a y-o-y decrease of 16.12% between 2018 and 2019 and a CAGR of -1.65% for the 19-28 period. The sharp increase of 2023 can be explained by the large contracting costs that accompany this period's hefty investments.

**WORKING CAPITAL: AS STABLE AS IPTO'S COMPLIMENTARY SERVICE NATURE**

IPTO offers a market balancing service of allocating several kinds of funds among energy market's participants (e.g.: PSOs, environmental penalties, etc.). These amounts are directly affected by the aggregate demand and supply and therefore were forecasted using energy's demand expected growth (from '18a € 933,470,000 to '28f € 1,083,330,000, Appendix 3 – IPTO's Income Statement). While IPTO neither benefits nor loses any money, this service directly affects company's receivables and payables. As the competition rises and the energy market is further segregated this, already negligible, exposure to participants' credibility appears to be further minimized (avg Working Capital change '19e – '28f: € 10,964,500, 2.3% of avg Cash Equivalents, Appendix 7 – IPTO's Cash Flow Statement). HEnEx (see "Domestic Electricity Market") will contribute in that direction as well as it will provide liquidity and allow producers to be better prepared using future contracts and other hedging mechanisms.

**Figure 24 : WACC 2020**

WACC Calc	2020f
Risk Free	-0.25%
MRP	5.72%
beta Asset	0.3119
D/E	106.66%
beta Equity	0.5648
CRP	4.07%
CAPM	7.05%
Cost of Debt	3.18%
Tax Rate	24.00%
D/(D+E)	51.61%
WACC	4.66%

*Source: Team Analysis*

**CASH GENERATION**

IPTO currently possesses a sustainable cash amount that also includes € 200 m, Ariadne's initial capital. Taking into consideration working capital's (excluding cash) inertia as receivables are correlated to the payables, IPTO is expected to use part of its liquidity pillar to finance partly its CapEx, keeping although a rather steady treasury (avg 1.00 & 1.70 cash and quick ratio respectively during '19e-'28f). In addition to IPTO's confident liquidity ratios, its cash is actively managed by the Bank of Greece offering a lucrative 3.15% rate.

**CAPITAL STRUCTURE: CURRENTLY AND FORESEEABLY UNDERLEVERAGED**

RAE's regulation includes a 0.7x-cap to IPTO's leverage (i.e.: D/(D+E)). While any constraint potentially affects management decisions, our analysis shows how this prudent measure is not anticipated to affect IPTO's capital structure any time soon. This is supported by 3 axes, resilient retained earnings (12.86% CAGR '19e - '28f), revenues that counterbalance CapEx by default and adequate liquidity. Consequently, the expected ratio's maximum of 58.39% (avg 54.52% throughout the next decade) falls well below not only the threshold of 70% (Figure 23), but also that of IPTO's peers (avg 65.68% '10a - '19e, source: Bloomberg).

**VALUATION**

**WACC: A DISCOUNTING AND A REMUNARATING FACTOR AT THE SAME TIME**

Two of the most important numbers in every valuation, usually uncorrelated, interact in IPTO's case as an estimation for WACC is used to remunerate the TSO through its Revenues in the beginning of each regulatory period. Using a higher CRP can lead, for example, to a higher DCF's price as the revenues' force offsets WACC's discounting force. Revenues' WACC differs from market's typical discounting WACC in three key areas. Firstly, this WACC's beta equity disregards each country's tax rate. Secondly, it is expressed in real terms, as inflation shouldn't burden customers. Lastly and most noteworthy, IPTO will be compensated with a premium between 1% and 2.5% for 12 years after the project's electrification due to accomplishing to carry through a Project of Major Importance, as Crete – Attica's interconnection is characterized. At the time, the premium hasn't been decided and this task falls within RAE's jurisdiction. We speculated that 1.75%, the middle ground, is a fair assumption to make at this point.

**RISK FREE RATE: HOMO ECONOMICUS AWAIT ESCAPE FROM NEGATIVE RATES**

If one uses current government bonds for long-term risk-free rate, one assumes a flat curve below zero and probably one is getting ready for the largest leveraged-asset bubble in economic history. In contrast to that view, we assumed that fiscal policy will eventually pick up and result in a mean reversion close to the post-'09-crisis average. Therefore, the risk free in our model starts from the current YTM of Germany's 10Y bond, EU's lowest, and gradually reaches 1.075%, last decade's average (Figure 25). In addition, the country's idiosyncratic risk is not circumvented as it is reflected in the CRP.

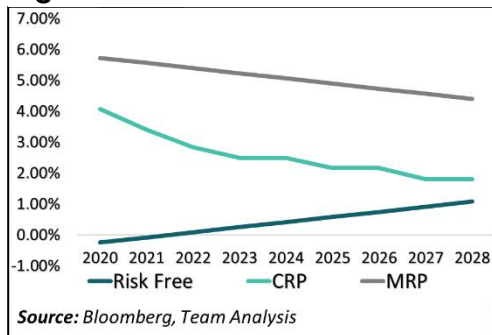
**COUNTRY RISK PREMIUM: BONDS' YIELDS DO NOT STRICTLY REPRESENT RISK**

As thoroughly explained above, one should not assume that 1.4%, current Greek 10Y YTM, properly reflects Greece's creditworthiness, especially while Greece remains more than 2 levels below investment grade area. In our analysis an adjusted for volatility default spread of 3.34% to 1.48% (Figure 27) was used based on Prof. A. Damodaran's analysis. This spread quantifies Greece's credit rating, which was assumed that Moody's will upgrade once in 2020, as it currently lacks one grade behind S&P and Fitch. Additional upgrades are expected, namely once in 2021 as the Greek government aims to make significant principal repayments, using primary budget surpluses and favorable market borrowing conditions and once again every 2 years.

**MARKET RISK PREMIUM: CONSECUTIVE REGIME CHANGES IN THIS CENTURY**

The Greek Stock Market experienced extensive turbulent periods, thus the past returns seem statistically insignificant for projecting future returns. On the contrary, the forward-looking Gordon's dividend growth approach, which adds expected dividend yield to the expected dividend growth rate counts less on the past and thus seems more appropriate. Subtracting from the sum of the expected dividend yield and the sustainable growth of ASE Index's components (i.e.: ROE\*Retention Ratio), the risk free rate, a relatively stable expected Greek Market Risk Premium of 5.38% on average (Figure 26, 27), is believed to fairly reflect future market risk.

**Figure 25 : Rf vs CRP vs MRP**



**Figure 26 : Rm Components**

Market Return Estimates	
ASE Average RoE	7.09%
ASE Avg Div Payout Ratio	51.07%
Sustainable Growth	48.93%
Expected Dividend Growth	3.47%
Expected '20 Dividend Yield	2%
Expected Market Return	5.47%

*Source: Bloomberg*

**Figure 27 : MRP & CRP**

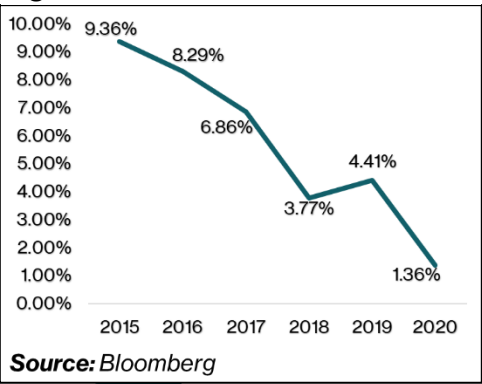
MRP Estimates	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
Risk Free Rate	-0.25%	-0.08%	0.08%	0.25%	0.41%	0.58%	0.74%	0.91%	1.08%
Market Return	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%
MRP	5.72%	5.55%	5.39%	5.22%	5.06%	4.89%	4.73%	4.56%	4.39%

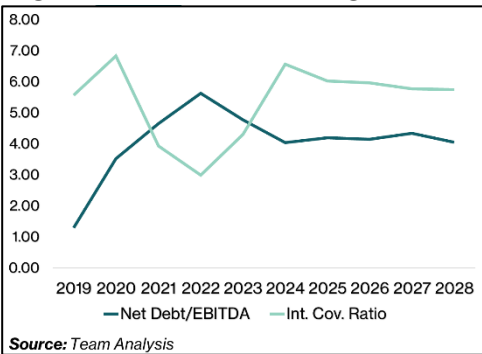
CRP Estimates	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
Tax rate	20%	20%	20%	20%	20%	20%	20%	20%	20%
Greece's Credit Rating	Ba3	Ba2	Ba1	Baa3	Baa3	Baa2	Baa2	Baa1	Baa1
Default spread	3.34%	2.79%	2.32%	2.04%	2.04%	1.77%	1.77%	1.48%	1.48%
Relative Equity Volatility	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
CRP Greece	4.07%	3.40%	2.83%	2.49%	2.49%	2.15%	2.15%	1.81%	1.81%

*Source: NYU Stern*

**Figure 28 : GR Bond 10Y**



**Figure 29 : Loan Servicing**



**Figure 30 : Regulated Asset Base**

IPTO's RAB Calculation		2020e in '000s €
(+)Net Tangible Fixed Assetst-1		1,355,481.00
(+)WIPt-1		663,074.13
(+)Investmentst-1		605,600.00
(=)A: Fixed Assetst(Pre-depreciation)		2,624,155.13
B: Depreciationt		64,584.98
C: Working Capitalt		73,262.11
D: Subsidiest		195,838.51
(=)A-B+C-D: Asset Valuet		2,468,993.40
<b>RABt=(AVt+RABt-1)/2</b>		<b>2,202,459.43</b>

Source: RAE, Team Analysis

**Figure 31 : Multiples**

Company	P/E	EV/EBITDA	Price
Transelectrica	12.36x	3.05x	€ 22.50
Redes Energeticas Nacionais SA	15.79x	9.46x	€ 2.81
<b>IPTO SA</b>	<b>17.09x</b>	<b>7.39x</b>	<b>€ 2.48</b>
Fluxys Belgium NV	35.92x	12.86x	€ 28.50
Red Electrica SA	15.11x	9.14x	€ 18.33
Terna S.p.A.	15.37x	11.47x	€ 5.81

Source: Team Analysis

**BETA (EQUITY)**

Since IPTO is not a public company, constructing its beta is slightly more complicated. Firstly, the adjusted beta, which is more longstanding, can be obtained by plotting a regression of each one of IPTO's most comparable peers and its according benchmark index. Then the implied unlevered beta of IPTO is derived using the historical trend of each peer's D/E ratio and the corporate tax rate of the respective country. Lastly, the beta equity is constructed by combining the estimated leverage, the unlevered beta and the Greek corporate tax rate. Both the derived betas are considered indicative, being aligned with industry's averages. These 4 detailed variables were then applied to the CAPM formula to calculate IPTO's CoE.

**COST OF DEBT: CREDIT LINE ACCOMMODATES HEAVY CAPEX FINANCING**

IPTO historically held a very competitive positioning in terms of third parties financing. Currently, apart from being a partial-SOE, IPTO maintains ties with China, a country with heavy outflows on global FDIs (4<sup>th</sup> largest net outflows in 2018 source: World Bank). Taking past ways and costs of borrowing into consideration, we concluded that IPTO should and can repay its most expensive old loans -the Company stated similar intentions- and then enter in a credit line agreement with either the Greek systemic banks or the Chinese ones or a synergy of these. This way of funding gives IPTO the flexibility to draw only the amount that cannot produce organically. An adequate interest rate can be a spread over the country's borrowing cost. According to Prof. A. Damodaran, a corporation with an Interest Coverage Ratio similar to IPTO's should add 1% spread to the 10Y government bond's YTM, resulting in a 2.4% rate for new loans. Weighting each loan with its respective rate, IPTO's CoD appears to follow a downward trend from 3.27% to 2.32% (2019 to 2028).

**NAV METHOD CONVERTS IPTO'S FAIR VALUE TO ADMIEH'S STOCK PRICE**

The common ground among the 4 different valuation methods for IPTO is the Net Adjusted Value that allowed ADMIE Holding's price to be derived. As ADMIE Holding claims 51% of IPTO's Net Income it is reasonable for one to deduce that 51% of IPTO's fair Equity Value represents ADMIE Holding's fair Enterprise Value and therefore Market Value as there is no Debt.

**RAB METHOD: APPROPRIATE, COHERENT, ACCURATE BUT SOMEWHAT MYOPIC**

IPTO's Regulated Asset Base is a significant component of its Allowed Revenue methodology and constitutes s a TSO's most important value metric. It represents the fair value of the company's Net Fixed Assets, upon which the return(R) is calculated (Appendix 28 – Fixed Assets Analysis). For each regulation period, the RAB is estimated as described in figure#. Certain Projects of Major Importance, such as ARIADNE Interconnection aren't included within the Regulated Asset Base until the Investment is finalized, and as a result they do not yield return while they are treated as Work in Progress (WIP). The RAB Method is a variation of Net Adjusted Value valuation method, excluding IPTO's trade receivables and payables since they are untied to its revenue generating activities -they include Public Service Obligation accounts-. We used 2020's expectations in order to arrive at a forward looking EV, weighting the method's valuation stability favorably, while considering its static nature -which lacks IPTO's future discounted value, a value that matters when a corporation pupates.

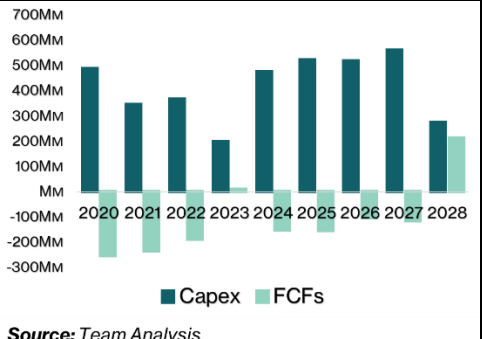
**DIVIDEND DISCOUNT MODEL (DDM): STABLE DIVIDEND POLICY AND PROFITS**

IPTO's stability results in steady capital flows and sustainable growth as expected RoE is sufficient to compensate for CoE (avg RoE – CoE spread 3.8% '19e-28f, Appendices 10,15), making IPTO a value creator in the mid to long-term. We applied a multi-period DDM for the decade ahead and the Terminal Value using Gordon's formula to estimate IPTO's perpetual value. Terminal growth rate was estimated using European Utilities Companies' Sustainable Growth Ratio of 1.28% (RoE 10.75%, Retention Ratio 11.95% source: NYU Stern). IPTO's CoE was calculated via CAPM (Appendix 15). This method was weighted 40% as we believe it both reflects the future value of IPTO, and it is based on steady flows, the ones that matter for the shareholder the most, that are calculated via a rather predictable Net Income.

**MULTIPLES APPROACH: LARGE DISCOUNT IN EV/EBITDA & P/E RATIOS**

TSOs across Europe in general predate IPTO and are usually better established. Accounting for Greek economy's remaining problems and ASE's small average volume of transactions, IPTO's large discount based on multiples valuation can be translated. At the same time part of IPTO's opportunities could have been overlooked and consequently we added a light-weighted price derived by the upside EV/EBITDA & P/E ratios of IPTO's most comparable peers imply.

**Figure 32 : Capex & FCF Term Structure**



**DISCOUNTED CASH FLOW (DCF): HYPERSENSITIVE TO THE CAPEX PLAN**

The picture that IPTO's Free Cash Flows to the Firm (FCFFs) shape is rather straightforward. The next decade's development plan dictates almost every flow to be below zero, while almost the whole value stems from perpetuity. The terminal value was calculated using two methods, the one described above and the exit multiples method using the median EV/EBITDA ratio of IPTO's peers. The price of this model, while it offers useful information, is highly sensitive to the last FCFF, which is subject to change and due to this Achilles' heel, its weight is 10%, the lowest of the rest. The WACC that was used is detailed below and compared to IPTO's RoIC it further corroborates the corporation's value creator characterization.

**INVESTMENT RISKS**

**VALUATION RISKS**

**SENSITIVITY ANALYSIS ON DCF's & DDM's MAIN VARIABLES: WACC, CoE & g**

With a 40% weighting, the RAB method plays an essential role in the determination of the final target price of ADMIEH. However due to the methodology's stativity, it would be idle to test the model's assumptions. Therefore, we decided to perform analyses on the most sensitive components of the proposed price.

**Figure 33 : DCF Sensitivity**

g	WACC	3.76%	4.06%	4.36%	4.66%	4.96%	5.26%	5.56%
0.89%	2.68	2.67	2.66	2.65	2.64	2.63	2.62	
1.02%	2.84	2.83	2.81	2.80	2.79	2.78	2.77	
1.15%	3.01	2.99	2.98	2.97	2.96	2.95	2.93	
1.28%	3.19	3.18	3.16	3.15	3.14	3.13	3.11	
1.41%	3.39	3.38	3.37	3.35	3.34	3.33	3.32	
1.54%	3.62	3.61	3.59	3.58	3.57	3.55	3.54	
1.67%	3.87	3.86	3.85	3.83	3.82	3.80	3.79	

Source: Team Analysis

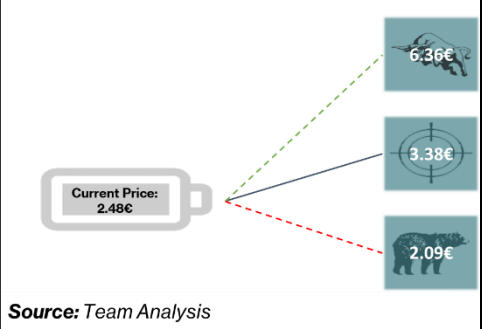
**Figure 34 : DDM Sensitivity**

g	CAPM	5.55%	6.05%	6.55%	7.05%	7.55%	8.05%	8.55%
0.68%	4.27	3.83	3.46	3.16	2.90	2.67	2.48	
0.88%	4.43	3.95	3.56	3.24	2.96	2.73	2.52	
1.08%	4.60	4.09	3.67	3.33	3.04	2.79	2.58	
1.28%	4.80	4.24	3.79	3.42	3.11	2.85	2.63	
1.48%	5.01	4.40	3.92	3.52	3.20	2.92	2.69	
1.68%	5.25	4.58	4.06	3.63	3.29	2.99	2.75	
1.88%	5.52	4.78	4.21	3.76	3.38	3.07	2.81	

Source: Team Analysis

**Figure 35 : Scenario Analysis**

	CAPM	Ariadne Premium	Inflation	Terminal Growth	'28 NE Aegean	Price
BULL	6.00%	2.50%	1.00%	2.56%	275,000	6.34
BASE	7.05%	1.75%	1.40%	1.28%	325,000	3.38
BEAR	9.50%	1.00%	2.20%	0.00%	400,000	2.10



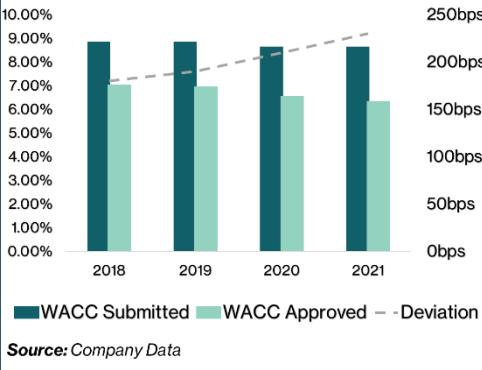
**RISKS TO THE TARGET PRICE**

Aiming to test both DCF and DDM methodologies' key variables, we conducted a sensitivity analysis on WACC, Terminal Growth and Cost of Equity. The outcome was an 85.71% and 87.76% chance respectively of sustaining our initial BUY recommendation. This optimistic yet potentially deceiving result made us want to stress the models in a less myopic fashion.

**MONTE CARLO SIMULATION**

Understanding the two methodologies' sensitivity to our assumptions, we performed a Monte Carlo simulation (Appendix 18 – Monte Carlo Simulation) to stress out the most crucial ones. We captured DCF's and DDM's effects in a hypothetical price with respective weightings 20% and 80%, a proxy for their actual 10%, 40% weightings in the final price. First, we used Cost of Equity and Terminal Growth to incorporate the models' complexity on a standalone basis. However, with respect to the regulator's methodology, we included Ariadne WACC premium and the CAPEX outflow to test IPTO's revenue stream. The proxy price surpassed a 10% upside potential in 87.35% of the simulations, resulting in a BUY recommendation and 1.05% of the iterations resulted in a SELL status. After the exercise, we deduced that the Investment Plan's CAPEX distribution is the most sensitive variable due to the expense's pivotal role in the determination of both the FCFs and the TV. This makes IPTO's profitability more important, since the increasing forecasted trend provides IPTO with a hedge against the need for leveraging. To secure robustness in our analyses, we used three scenarios of scaling adversity for the same variables in the final target price (Figure 35). According to the results an average 50% unfavorable change from our base scenario must take place, should the recommendation change to a SELL. A rather improbable scenario due to the variables' low correlation.

**Figure 36 : Approved WACC vs Submitted**



**INVESTMENT RISKS: DIRECT RISKS AND THOSE THAT STEM FROM IPTO**

**ADMIE HOLDING RISK #1 | INCREASE OF IPTO'S SHARE CAPITAL - EQUITY RISK**

Possible Increase of IPTO's Share Capital will force the Company to participate with at least 51% of the increase in order to hold majority rights. Either funded through loan or retained earnings, the impact on dividends would be present sooner or later. Additionally, in case ADMIE Holding decided not to participate, equity dilution would be imminent. Nevertheless, an Increase in Share Capital is not currently required or planned by IPTO.

**ADMIE HOLDING RISK #2 | REVENUE STABILITY - BUSINESS RISK**

The only significant cash inflow of ADMIE Holding is the dividends from IPTO. In fact, ADMIE Holding's purpose is simply to facilitate the Greek's state control over IPTO with less than 51% ownership. Since it isn't a typical holding company-managing a large portfolio of companies-

**Figure 37 : Risks & Mitigation Factors**

RISKS	MITIGATING FACTORS
<b>ADMIE Holding</b>	
Increase of IPTO's Share Capital	The company does not plan an ISC for the near future
	The Investment Plan can be adequately funded through own capital and loans
Cash Flow Stability and lack of diversification	IPTO is bound by law to distribute at
<b>IPTO</b>	
Heavy Regulation from RAE	Proper financial planning
10Year Investment Plan Delay	IPTO's projects are in fact accelerating
	Energy investments in Greece are picking up steam
Uninsured Assets	Assets are distributed across Greece's territory
	In need of repairs IPTO will be reimbursed for the cost due to its revenue methodology
Political Instability & Borrowing Costs	Greece's satisfactory Financial Performance
	Business-friendly political environment
Certainty of Revenue Streams	IPTO has high priority in case of a supplier's default
	With the exception of PPC, the market shares of other suppliers are relatively small
Environmental & Contracting Litigations	IPTO is regularly adjusting its provisions for litigations
	Most of the projects are underwater cables removing the probability of environmental litigations
Market Prices and Construction Costs	Stable/downward trend for those materials' prices
	Even if Capex is ultimately higher, IPTO will still be reimbursed for the cost due to its revenue methodology

ADMIE Holding is dependent on IPTO's performance and RAE's decisions. As such, possible restrictions or incapability of collecting the dividend from IPTO will have a great impact on its ability to cover its expenses and on the dividend payouts to the shareholders. The probability and impact of this negative sums up the risks mentioned below stemming from the business unit of IPTO.

**IPTO RISK #1 | HEAVY REGULATION FROM RAE - REGULATORY RISK**

IPTO's operation is subject to a rigorous and complex legislative and regulatory framework, governed by RAE's decisions and in need of its approval. As such, IPTO's profitability can greatly vary depending on the parameters of AR and RR calculation set by RAE's leadership. Historically IPTO's results diverge significantly from RAE's forecasted and approved ones (Figure 36), rebounding to a shroud of uncertainty around IPTO's self-management capabilities and the validity of any financial analysis. Another problem deriving from the regulatory framework is its inflexibility to respond to unpredictable situations, as in need for major decision a legislative act approved by RAE would be necessary. As stated in the company's statements, IPTO faces difficulties in recruiting or retaining experienced executives, with potential adverse effects on its ability to develop and implement its strategy.

**IPTO RISK #2 | DELAY IN THE 10YEAR DEVELOPMENT PLAN - STRATEGIC RISK**

Since one of IPTO's revenue drivers is its Investment Plan, one of the most impactful risks is that of a possible delay of its execution (Appendix 23 - SWOT Analysis). Examples include delays in competitive auctions and contracts' conclusion, lack of proper legislation, construction companies not delivering on due date, local citizens' protests etc. It must be noted that in case of a serious delay, RAE is eligible to impose immediate project execution. Alternatively, it could direct an increase of IPTO's share capital accepting third party financing or relocating jurisdiction through a public auction. In any case, there is a potential loss of value due to the investment horizon's lengthening.

**IPTO RISK #3 | UNINSURED ASSETS - OPERATIONAL RISK**

IPTO's Assets are currently not insured, and even though in the following years IPTO's RAB will triple in size, there are no evidence to this attitude changing. IPTO states as reasoning the fact that these assets are scattered across Greece and thus the potential damage to one area is minimal. Even though the former fact might hold some truth, it does not negate the adverse effect of a natural disaster on RAB's Value and consequently on IPTO's financials, as costly repairs would be needed, effectively lowering the FCFFs.

**IPTO RISK #4 | POLITICAL INSTABILITY & BORROWING COSTS - COUNTRY RISK**

IPTO's activities are executed within Greek territory, and thus there is exposure to Greece's country risk. Even though the political climate has stabilized, and Greece's solvency has improved in the eyes of Credit Rating agencies (Appendix 21 - PEST Analysis), discarding political risk for a company heavily intertwined the Greek State like IPTO would be unwise. Governmental decisions directly affect IPTO's financial results, either through RAE's decisions, implementation of new legislation, increased country risk premium -thus higher borrowing costs-, taxation changes etc. Additionally, the strained relationship between Greece and Turkey might pose a threat in IPTO's attempts for interconnections with foreign countries. Nevertheless, the majority of country risk is countered by IPTO's semi-public nature and Greece's improving financial performance

**IPTO RISK #5 | CERTAINTY OF REVENUE STREAMS - FINANCIAL RISK**

IPTO's revenue is mainly collected from Electricity Suppliers. The impact of an insolvent supplier on IPTO's cash flows depends on its market share. Currently PPC possesses by far the largest market share, but the probability of PPC not servicing its liabilities towards IPTO is deemed minor -due to PPC's semi-public nature as well as its necessity for Greece's electricity markets-. As such, the stability of operating cash flows is almost guaranteed. Nevertheless, this could change in the following years, as the electricity market becomes more competitive, and other suppliers are increasing their market share, segmenting IPTO's revenue stream and exposing it to more credit risk from each supplier.

**IPTO RISK #6 | ENVIRONMENTAL & CONTRACTING LITIGATIONS - LEGAL RISK**

IPTO has a lot of pending court cases right now, mostly for litigations with construction companies that require constant assessment of potential damage and proper accounting treatment. With IPTO's expansion, similar cases, as well as some regarding environmental threats might be filed in the medium/long run. It must be noted that IPTO is keeping track of these litigations very closely and adjusts its relevant provisions on a regular basis.

**IPTO RISK #7 | MARKET PRICES AND CONSTRUCTION COSTS - MARKET RISK**

IPTO's Investment Plan is based necessarily on certain estimations regarding its capital expenditures. Since the scope of this report extends through a decade it is of importance to highlight the probability of higher constructions cost, mainly due to potential rise of the raw

**Figure 38 : ADMIEH BoD**

Position	Name
Chairman & CEO	Iason Rousopoulos
Vice Chairman	Ioannis Kampouris
Member	Konstantinos Karakatsanis
Member	Evangelos Darousos
Member	Alexandros Nikolouzos

Source: Company Data

**Figure 39 : ADMIEH Corp. Gov Score**

Category	Average Score
Executive Committee	1.82
Audit Committee	3
Protection of Shareholders' Rights	3
<b>Total Average Score (out of 3)</b>	<b>2.61</b>

Source: Team Analysis, CFA Corp. Gov. Manual

**Figure 40 : IPTO Corp. Gov. Score**

Categories	Score (out of 10)	Weight	Calculation
Audit and Risk Oversight Board	10	25%	25%
Structure Shareholder Rights	8	35%	28%
Compensation and Remuneration	8	25%	20%
	5	15%	7.5%
<b>Total Score</b>	<b>7.75</b>	<b>100%</b>	<b>77.5%</b>

Source: Team Analysis, ISS Rating

**Figure 41 : IPTO ESG Score**

Categories	Pillars	Pillar Score	Grade
Environmental	Resources Use	0.44	C+
	Emissions		
	Innovation		
Social	Workforce	0.66	B
	Human Rights		
	Community		
Governance	Product Responsibility	0.55	B-
	Management		
	Shareholder Rights		
<b>ESG Total Grade</b>		<b>0.55</b>	<b>B-</b>

Source: Team Analysis, Reuters, Refinitiv

materials needed for cable manufacturing. Additionally, since IPTO is remunerated for its CAPEX and Asset Base the cost will be accounted for in each year's Total Revenue, minimizing the loss if any.

## CORPORATE GOVERNANCE

### ADMIE HOLDING's GOVERNANCE

ADMIE Holding's Board of Director consists of 5 members two of which are independent. A corporate governance assessment was conducted for ADMIE Holding based on CFA's Corporate Governance Manual, supplemented with the team's evaluation (Figure 38, 39). The company's governance policy is equipped with solid principles, operating with transparency on the function of the Audit Committee and respect to Shareholder Rights. However, a possible conflict of interest might arise because only the 40% of the BoD is independent and the role of the CEO & Chairman is not separated. The lack of Compensation Committee could be pointed out as a major drawback of company's governance policy, however it can be justified due to of the small number of its staff (Appendix 31 – ADMIEH's Governance Assessment).

### IPTO's GOVERNANCE

IPTO's BoD consists of 9 members, 4 of whom are independent (44.4%), and maintains 14 distinct departments. The company complies with accepted governance, social and environmental policies. The team's corporate governance analysis, assisted by Reuters & Refinitiv, indicated that improved compensation and remuneration policies, combined with an empowered CSR strategy could upgrade the administration structure. IPTO's governance was scored B- compared to its peer's B+ grade (Figure 41). It must be noted that information about ESG metrics of IPTO and most of its peers is inadequately reported on the database. As a result, these grades do not entirely reflect the company's governance strategy, and an additional governance assessment was conducted using the ISS (Institutional Shareholder Services) Rating Methodology (Figure 40). By utilizing this procedure - focused more on the company's board structure and its affiliations with the shareholder and management-, a 7.75/10 grade was attributed. with the compensation & remuneration policy highlighted as the most crucial pillar the company should amend (Appendix 32 – IPTO Corporate Governance Assessment).

### IPTO's ENVIRONMENTAL ASSESSMENT

Regarding IPTO's environmental sustainability there is definitely room for improvement as the C+ grade is considered rather low compared to its peers' average B (Figure 41). Despite the company's good scores on Environmental Innovation & Emissions Reduction, this low grade originates mostly from poor performance on the Renewable Sources pillar as IPTO has not fully converted its energy means yet. Nevertheless, this rate is expected to increase in the following years as it is certain that RES will rapidly replace other energy sources and IPTO will inevitably conform. (Appendix 33 – IPTO's Environmental Assessment).

### IPTO's SOCIAL ASSESSMENT

On a social level, the company provides high labor standards and ensures a healthy and safe workplace for its employees. IPTO's overall social grade is B, confidently higher than its peer group's C. Social consciousness is also validated by the company's operating activity and nature; its main goal is to fulfil social needs regarding electricity interconnections with the minimum cost impact transmitted to the consumers. Although the company might not yet run programs solely towards social awareness, as previously mentioned social sensibility is purely predicted in the company's role. The social analysis was supported by Reuters & Refinitiv database (Appendix 34 - IPTO's Social Assessment). Overall, the combined result of IPTO's ESG assessment is B-, reflecting its adequate governance policies and the social aspect of its business.

# Appendix 1: Abbreviations

ABBREVIATION	FULL TERM
AR	Allowed Revenue
ASE	Athens Stock Exchange
BoC	Bank of China
BoG	Bank of Greece
CAGR	Compounded Annual Growth Rate
CapEx	Capital Expenditures
CAPM	Capital Asset Pricing Model
CoD	Cost of Debt
CoE	Cost of Equity
CRP	Country Risk Premium
CSR	Corporate Social Responsibility
D/E	Debt-to-Equity Ratio
DDM	Dividend Discount Model
DFCFF	Discounted Free Cash Flows to the Firm
DPS	Dividends Per Share
EBITDA	Earnings Before Interest Tax Depreciation and Amortization
ENTSO-E	Euroean Transmission System Operators of Electricity
EPS	Earnings Per Share
EV	Enterprise Value
FCFF	Free Cash Flows to the Firm
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HEMO	Hellenic Electricity Market Operator
HEnEx	Hellenic Energy Exchange
HVC	High Voltage Centers
ICBC	Industrial and Commercial Bank of China
IPTO	Independent Power Transmission Operator
ISS	Institutional Shareholder Services
MRP	Market Risk Premium
NPEC	National Plan for Electricity and Climate
P/B	Price-to-Book Ratio
P/E	Price-to-Earnings Ratio
PPC	Public Power Corporation
PSO	Public Service Obligations
RAB	Regulated Asset Base
RAE	Regulatory Authority for Energy
RES	Renewable Energy Sources
ROE	Return on Equity
ROIC	Return on Invested Capital
RR	Required Revenue
S&P	Standard & Poor's Global Ratings
SOE	State Owned Enterprise
TSO	Transmission System Operator
TV	Terminal Value
VES	Voluntarily Exit Scheme
WACC	Weighted Average Cost of Capital
WIP	Work in Progress
YTM	Yield to Maturity

## Appendix 2: ADMIEH Income Statement

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Net Sales</b>										
Share of investments accounted for using the Equity Method (IPTO 51%)	24,024	42,353	47,298	67,339	53,522	40,278	55,474	89,317	90,584	100,458
<i>Income/(Expenses)</i>										
Personnel Compensations	(129.0)	(107.0)	(107.6)	(108.6)	(110.0)	(111.6)	(113.1)	(114.7)	(116.3)	(117.9)
Third Party Benefits & Fees	(263.0)	(48.0)	(48.3)	(48.7)	(49.4)	(50.0)	(50.7)	(51.5)	(52.2)	(52.9)
Other Expenses	(580.0)	(84.0)	(40.0)	(40.0)	(40.0)	(40.0)	(40.0)	(40.0)	(40.0)	(40.0)
<b>EBITDA</b>	<b>23,052</b>	<b>42,114</b>	<b>47,102</b>	<b>67,142</b>	<b>53,323</b>	<b>40,076</b>	<b>55,270</b>	<b>89,110</b>	<b>90,376</b>	<b>100,247</b>
D&A	(2)	(4)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>EBIT</b>	<b>23,050</b>	<b>42,110</b>	<b>47,100</b>	<b>67,140</b>	<b>53,321</b>	<b>40,074</b>	<b>55,268</b>	<b>89,108</b>	<b>90,374</b>	<b>100,245</b>
Financial Expenses & Income	(8)	156	165	239	269	441	332	225	354	644
<b>EBT</b>	<b>23,042</b>	<b>42,266</b>	<b>47,265</b>	<b>67,379</b>	<b>53,590</b>	<b>40,515</b>	<b>55,600</b>	<b>89,333</b>	<b>90,728</b>	<b>100,889</b>
Other comprehensive income	3,778	4,256	-	-	-	-	-	-	-	-
<b>Net Profit/(Loss)</b>	<b>26,820</b>	<b>46,522</b>	<b>47,265</b>	<b>67,379</b>	<b>53,590</b>	<b>40,515</b>	<b>55,600</b>	<b>89,333</b>	<b>90,728</b>	<b>100,889</b>

Source: ADMIEH's Financial Statements, Team Analysis

## Appendix 3: IPTO Income Statement

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Net Sales</b>										
Revenue from Transmission System Rent	236,858	222,676	239,263	292,450	304,442	268,643	316,581	414,497	456,936	505,568
Operator Sales	1,617,049	933,470	947,472	961,684	976,109	990,751	1,005,612	1,020,696	1,036,007	1,051,547
Operator Purchases	(1,617,049)	(933,470)	(947,472)	(961,684)	(976,109)	(990,751)	(1,005,612)	(1,020,696)	(1,036,007)	(1,051,547)
Other Sales	19,631	26,559	23,241	28,408	29,573	26,095	30,752	40,263	44,386	49,110
Total Revenue	256,489	249,235	262,504	320,858	334,015	294,738	347,333	454,760	501,322	554,678
<i>Income/(Expenses)</i>										
Operating Expenses	(79,985)	(92,824)	(77,862)	(78,461)	(79,066)	(73,129)	(87,989)	(75,410)	(76,192)	(76,984)
<b>EBITDA</b>	<b>176,504</b>	<b>156,411</b>	<b>184,642</b>	<b>242,397</b>	<b>254,949</b>	<b>221,610</b>	<b>259,344</b>	<b>379,350</b>	<b>425,130</b>	<b>477,693</b>
D&A	(64,317)	(67,342)	(54,899)	(56,166)	(95,208)	(97,131)	(98,572)	(136,190)	(174,083)	(196,721)
Provision for Risk & Expenses	(5,528)	26,983	4,246	(2,983)	(3,106)	(2,740)	(3,229)	(4,228)	(4,661)	(5,157)
Other Income	4,593	7,942	5,852	7,152	7,446	6,570	7,743	10,137	11,175	12,365
Other Expenses	(3,594)	(8,574)	(8,574)	(8,574)	(8,574)	(8,574)	(8,574)	(8,574)	(8,574)	(8,574)
<b>EBIT</b>	<b>107,658</b>	<b>115,420</b>	<b>131,266</b>	<b>181,826</b>	<b>155,507</b>	<b>119,735</b>	<b>156,711</b>	<b>240,496</b>	<b>248,988</b>	<b>279,606</b>
Financial Expenses	(27,438)	(17,788)	(23,548)	(26,585)	(39,500)	(40,038)	(36,404)	(36,588)	(41,292)	(46,862)
Financial Income	2,733	11,735	8,209	9,806	15,174	19,023	15,658	15,005	14,325	13,476
<b>EBT</b>	<b>82,953</b>	<b>109,367</b>	<b>115,927</b>	<b>165,048</b>	<b>131,182</b>	<b>98,721</b>	<b>135,966</b>	<b>218,913</b>	<b>222,021</b>	<b>246,220</b>
Income Tax	(21,215)	(23,497)	(23,185)	(33,010)	(26,236)	(19,744)	(27,193)	(43,783)	(44,404)	(49,244)
<b>Net Profit/(Loss)</b>	<b>61,738</b>	<b>85,870</b>	<b>92,742</b>	<b>132,038</b>	<b>104,946</b>	<b>78,976</b>	<b>108,773</b>	<b>175,130</b>	<b>177,617</b>	<b>196,976</b>

Source: IPTO's Financial Statements, Team Analysis

## Appendix 4: ADMIEH Balance Sheet

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Assets</b>										
Investments accounted using the equity	519,572	550,577	575,978	619,669	639,521	653,038	688,373	749,953	795,879	851,044
Tangible Assets	5	5	6	7	8	9	10	11	12	13
Cash and Cash Equivalents	2,181	4,843	7,028	7,942	13,019	9,801	6,616	10,430	19,033	19,780
Other Recievables	649	9,914	9,914	9,914	9,914	9,914	9,914	9,914	9,914	9,914
<b>Total Assets</b>	<b>522,408</b>	<b>565,338</b>	<b>592,925</b>	<b>637,531</b>	<b>662,462</b>	<b>672,762</b>	<b>704,912</b>	<b>770,307</b>	<b>824,837</b>	<b>880,751</b>
<b>Liabilities</b>										
Trade and Other Liabilities	3,749	20	14	14	14	14	14	14	14	14
<b>Total Liabilities</b>	<b>3,749</b>	<b>20</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>
<b>Equity</b>										
Share Capital	491,840	491,840	491,840	491,840	491,840	491,840	491,840	491,840	491,840	491,840
Other Reserves	3,778	8,768	8,621	8,621	8,621	8,621	8,621	8,621	8,621	8,621
Retained Earnings	23,041	64,710	92,450	137,056	161,987	172,287	204,437	269,832	324,362	380,276
<b>Total Equity</b>	<b>518,659</b>	<b>565,318</b>	<b>592,911</b>	<b>637,517</b>	<b>662,448</b>	<b>672,748</b>	<b>704,898</b>	<b>770,293</b>	<b>824,823</b>	<b>880,737</b>
<b>Total Liabilities &amp; Equity</b>	<b>522,408</b>	<b>565,338</b>	<b>592,925</b>	<b>637,531</b>	<b>662,462</b>	<b>672,762</b>	<b>704,912</b>	<b>770,307</b>	<b>824,837</b>	<b>880,751</b>

Source: ADMIEH's Financial Statements, Team Analysis

## Appendix 5: IPTO Balance Sheet

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Assets</b>										
Tangible Assets	1,580,899	1,671,314	2,050,555	2,576,570	2,892,534	3,233,418	3,350,375	3,783,797	4,230,532	4,646,960
Intangible Assets	247	215	240	301	338	378	391	442	494	543
Other Assets	135,369	122,211	119,735	123,525	122,997	138,403	154,412	157,277	163,685	171,060
Cash and Cash Equivalents	771,849	602,933	484,665	578,019	585,812	478,989	458,244	436,661	409,694	376,308
Recievables	1,250,320	715,923	244,825	248,497	252,225	256,008	259,848	263,746	267,702	271,718
<b>Total Assets</b>	<b>3,738,684</b>	<b>3,112,596</b>	<b>2,900,019</b>	<b>3,526,913</b>	<b>3,853,906</b>	<b>4,107,195</b>	<b>4,223,271</b>	<b>4,641,924</b>	<b>5,072,108</b>	<b>5,466,589</b>
<b>Liabilities</b>										
Long Term Borrowings	520,361	623,186	738,661	1,130,827	1,451,539	1,598,387	1,606,057	1,802,069	2,034,133	2,216,145
Consumers' Contribution & Subsidies	218,006	294,951	376,509	486,433	560,560	637,088	672,747	771,131	875,633	976,314
Trade and Other Payables	1,646,172	729,261	220,701	224,012	227,372	230,782	234,244	237,758	241,324	244,944
Other Liabilities	386,931	437,190	486,333	522,158	412,025	412,025	412,025	412,025	412,025	412,025
<b>Total Liabilities</b>	<b>2,771,470</b>	<b>2,084,588</b>	<b>1,822,204</b>	<b>2,363,430</b>	<b>2,651,496</b>	<b>2,878,282</b>	<b>2,925,074</b>	<b>3,222,982</b>	<b>3,563,115</b>	<b>3,849,428</b>
<b>Equity</b>										
Share Capital	38,444	38,444	38,444	38,444	38,444	38,444	38,444	38,444	38,444	38,444
Legal Reserves	12,815	12,828	12,829	12,829	12,829	12,829	12,829	12,829	12,829	12,829
Other Reserves	(10,372)	(13,252)	(13,252)	(13,252)	(13,252)	(13,252)	(13,252)	(13,252)	(13,252)	(13,252)
Fixed Assets' Statutory Revaluation	639,712	650,939	650,939	650,939	650,939	650,939	650,939	650,939	650,939	650,939
Retained Earnings	286,615	339,049	388,856	474,523	513,449	539,953	609,238	729,982	820,033	928,201
<b>Total Equity</b>	<b>967,214</b>	<b>1,028,008</b>	<b>1,077,816</b>	<b>1,163,483</b>	<b>1,202,409</b>	<b>1,228,913</b>	<b>1,298,198</b>	<b>1,418,942</b>	<b>1,508,993</b>	<b>1,617,161</b>
<b>Total Liabilities &amp; Equity</b>	<b>3,738,684</b>	<b>3,112,596</b>	<b>2,900,019</b>	<b>3,526,913</b>	<b>3,853,906</b>	<b>4,107,195</b>	<b>4,223,271</b>	<b>4,641,924</b>	<b>5,072,108</b>	<b>5,466,589</b>

Source: IPTO's Financial Statements, Team Analysis

## Appendix 6: ADMIEH Cash Flow Statement

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Cash Flow from Operating Activities</b>										
<b>EBT</b>	<b>23,042</b>	<b>42,265</b>	<b>47,265</b>	<b>67,379</b>	<b>53,590</b>	<b>40,515</b>	<b>55,600</b>	<b>89,333</b>	<b>90,728</b>	<b>100,889</b>
Share of investments accounted for using the Equity Method (IPTO 51%)	(24,024)	(42,353)	(47,298)	(67,339)	(53,522)	(40,278)	(55,474)	(89,317)	(90,584)	(100,458)
Financial Adjustments	21	(152)	(163)	(237)	(267)	(439)	(330)	(223)	(352)	(642)
Operating Profit before WC changes	(1,583)	(1,293)	(196)	(197)	(199)	(202)	(204)	(206)	(208)	(211)
<b>Net Cash Flows from Operating Activities</b>	<b>(1,583)</b>	<b>(1,293)</b>	<b>(196)</b>	<b>(197)</b>	<b>(199)</b>	<b>(202)</b>	<b>(204)</b>	<b>(206)</b>	<b>(208)</b>	<b>(211)</b>
<b>Cash Flows from Investing Activities</b>										
<b>Net Cash Flows from Investing Activities</b>	<b>(16)</b>	<b>(2)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>
<b>Cash Flows from Financing Activities</b>										
Dividend received from IPTO SA	-	10,210	21,897	23,649	33,670	26,761	20,139	27,737	44,658	45,292
Other Financing Activities	3,782	(6,254)	(19,508)	(22,534)	(28,390)	(29,774)	(23,118)	(23,713)	(35,844)	(44,331)
<b>Net Cash Flows from Financing Activities</b>	<b>3,782</b>	<b>3,956</b>	<b>2,389</b>	<b>1,115</b>	<b>5,280</b>	<b>(3,013)</b>	<b>(2,979)</b>	<b>4,024</b>	<b>8,814</b>	<b>961</b>
<b>Net Increase/(Decrease) in Cash and Cash Equivalents</b>	<b>2,183</b>	<b>2,661</b>	<b>2,190</b>	<b>914</b>	<b>5,077</b>	<b>(3,218)</b>	<b>(3,186)</b>	<b>3,814</b>	<b>8,603</b>	<b>747</b>
<b>Cash and cash equivalents, opening balance</b>	<b>-</b>	<b>2,183</b>	<b>4,844</b>	<b>7,028</b>	<b>7,942</b>	<b>13,019</b>	<b>9,801</b>	<b>6,616</b>	<b>10,430</b>	<b>19,033</b>
<b>Cash and cash equivalents, closing balance</b>	<b>2,183</b>	<b>4,844</b>	<b>7,034</b>	<b>7,942</b>	<b>13,019</b>	<b>9,801</b>	<b>6,616</b>	<b>10,430</b>	<b>19,033</b>	<b>19,780</b>

Source: ADMIEH's Financial Statements, Team Analysis

## Appendix 7: IPTO Cash Flow Statement

In thousand €	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
<b>Cash Flows from Operating Activities</b>										
<b>EBT</b>	<b>82,952</b>	<b>109,365</b>	<b>115,927</b>	<b>165,048</b>	<b>131,182</b>	<b>98,721</b>	<b>135,966</b>	<b>218,913</b>	<b>222,021</b>	<b>246,220</b>
Tax Payments	(57,140)	(29,046)	(23,185)	(33,010)	(26,236)	(19,744)	(27,193)	(43,783)	(44,404)	(49,244)
D&A	64,317	67,342	54,899	56,166	95,208	97,131	98,572	136,190	174,083	196,721
Operating Profit before WC change	118,279	140,362	175,134	222,966	235,384	204,462	250,020	342,481	388,678	437,590
(Increase)/Decrease in:										
Trade and Other Receivables & Obligations	553,703	(357,632)	(37,462)	(362)	(367)	(373)	(378)	(384)	(390)	(396)
Other Liabilities and Accrued Expenses	(45,648)	21,592	44,849	(6,773)	(2,578)	(18,146)	(19,239)	(7,093)	(11,069)	(12,532)
<b>Net Cash Flows from Operating Activities</b>	<b>626,334</b>	<b>(195,678)</b>	<b>182,521</b>	<b>215,831</b>	<b>232,439</b>	<b>185,944</b>	<b>230,402</b>	<b>335,004</b>	<b>377,219</b>	<b>424,662</b>
<b>Cash Flows from Investing Activities</b>										
Purchase of Tangible and Intangible Assets	(70,133)	(178,160)	(458,646)	(605,661)	(428,637)	(455,040)	(246,814)	(592,379)	(648,419)	(643,633)
Other Investing Adjustments	17,119	91,316	97,827	128,150	98,929	107,937	63,887	130,755	141,026	139,242
<b>Net Cash Flows from Investing Activities</b>	<b>(53,014)</b>	<b>(86,844)</b>	<b>(360,819)</b>	<b>(477,512)</b>	<b>(329,708)</b>	<b>(347,102)</b>	<b>(182,927)</b>	<b>(461,624)</b>	<b>(507,393)</b>	<b>(504,391)</b>
<b>Cash Flows from Financing Activities</b>										
Financial Adjustments	(2,614)	137,156	102,965	401,407	171,080	106,809	(28,733)	159,423	190,772	135,151
Dividends Payable	(92,944)	(23,553)	(42,935)	(46,371)	(66,019)	(52,473)	(39,488)	(54,386)	(87,565)	(88,808)
<b>Net Cash Flows from Financing Activities</b>	<b>(95,558)</b>	<b>113,603</b>	<b>60,030</b>	<b>355,036</b>	<b>105,061</b>	<b>54,336</b>	<b>(68,221)</b>	<b>105,037</b>	<b>103,207</b>	<b>46,343</b>
<b>Net Increase of Cash &amp; Cash Equivalents</b>	<b>477,762</b>	<b>(168,919)</b>	<b>(118,268)</b>	<b>93,355</b>	<b>7,792</b>	<b>(106,822)</b>	<b>(20,745)</b>	<b>(21,583)</b>	<b>(26,967)</b>	<b>(33,386)</b>
<b>Cash &amp; Cash Eq. at the Beginning of FY</b>	<b>294,086</b>	<b>771,848</b>	<b>602,929</b>	<b>484,661</b>	<b>578,015</b>	<b>585,808</b>	<b>478,985</b>	<b>458,240</b>	<b>436,657</b>	<b>409,690</b>
<b>Cash &amp; Cash Eq. at the End of FY</b>	<b>771,848</b>	<b>602,929</b>	<b>484,661</b>	<b>578,015</b>	<b>585,808</b>	<b>478,985</b>	<b>458,240</b>	<b>436,657</b>	<b>409,690</b>	<b>376,304</b>

Source: IPTO's Financial Statements, Team Analysis

## Appendix 8: ADMIEH Common Sizes

### ADMIE Holding's Common Size Balance Sheet

	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Cash and Cash Equivalents	0.4%	0.9%	1.2%	1.2%	2.0%	1.5%	0.9%	1.4%	2.3%	2.2%
Investments Accounted using the Equity Method	99.5%	97.4%	97.1%	97.2%	96.5%	97.1%	97.7%	97.4%	96.5%	96.6%
Other Assets	0.1%	1.8%	1.7%	1.6%	1.5%	1.5%	1.4%	1.3%	1.2%	1.1%
<b>Assets</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Trade and Other Liabilities	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Liabilities</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Retained Earnings	4.4%	11.4%	15.6%	21.5%	24.5%	25.6%	29.0%	35.0%	39.3%	43.2%
Share Capital	94.8%	87.0%	83.0%	77.1%	74.2%	73.1%	69.8%	63.9%	59.6%	55.8%
Other Equity	0.7%	1.6%	1.5%	1.4%	1.3%	1.3%	1.2%	1.1%	1.0%	1.0%
<b>Equity</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

### ADMIE Holding's Common Size Income Statement

	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Total Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Operating Expenses	4.0%	0.6%	0.4%	0.3%	0.4%	0.5%	0.4%	0.2%	0.2%	0.2%
D&A	0.008%	0.009%	0.004%	0.003%	0.004%	0.005%	0.004%	0.002%	0.002%	0.002%
EBIT	95.9%	99.4%	99.6%	99.7%	99.6%	99.5%	99.6%	99.8%	99.8%	99.8%
<b>Net Profit/(Loss)</b>	112%	110%	100%	100%	100%	100%	100%	100%	100%	100%

Source: ADMIEH's Financial Statements, Team Analysis

## Appendix 9: IPTO Common Sizes

### IPTO's Common Size Balance Sheet

	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Cash and Cash Equivalents	20.6%	19.4%	16.7%	16.4%	15.2%	11.7%	10.9%	9.4%	8.1%	6.9%
Tangible Assets	42.3%	53.7%	70.7%	73.1%	75.1%	78.7%	79.3%	81.5%	83.4%	85.0%
Other Assets	3.6%	3.9%	4.1%	3.5%	3.2%	3.4%	3.7%	3.4%	3.2%	3.1%
<b>Assets</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Long Term Borrowings	18.8%	29.9%	40.5%	47.8%	54.7%	55.5%	54.9%	55.9%	57.1%	57.6%
Other Liabilities	81.2%	70.1%	59.5%	52.2%	45.3%	44.5%	45.1%	44.1%	42.9%	42.4%
<b>Liabilities</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Retained Earnings	29.6%	33.0%	36.1%	40.8%	42.7%	43.9%	46.9%	51.4%	54.3%	57.4%
Fixed Assets Statutory Revolution	66.1%	63.3%	60.4%	55.9%	54.1%	53.0%	50.1%	45.9%	43.1%	40.3%
Share Capital	4.0%	3.7%	3.6%	3.3%	3.2%	3.1%	3.0%	2.7%	2.5%	2.4%
Other Equity	1.1%	1.3%	1.2%	1.1%	1.1%	1.1%	1.0%	0.9%	0.9%	0.8%
<b>Equity</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

### IPTO's Common Size Income Statement

	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Total Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Operating Expenses	31.2%	37.2%	29.7%	24.5%	23.7%	24.8%	25.3%	16.6%	15.2%	13.9%
D&A	25.1%	27.0%	20.9%	17.5%	28.5%	33.0%	28.4%	29.9%	34.7%	35.5%
EBIT	42.0%	46.3%	50.0%	56.7%	46.6%	40.6%	45.1%	52.9%	49.7%	50.4%
<b>Net Profit/(Loss)</b>	<b>24.1%</b>	<b>34.5%</b>	<b>35.3%</b>	<b>41.2%</b>	<b>31.4%</b>	<b>26.8%</b>	<b>31.3%</b>	<b>38.5%</b>	<b>35.4%</b>	<b>35.5%</b>

Source: IPTO's Financial Statements, Team Analysis

## Appendix 10: IPTO Financial Ratios

Profitability (IPTO)	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
Gross Margin	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Operating Margin	50.0%	56.7%	46.6%	40.6%	45.1%	52.9%	49.7%	50.4%	50.3%	51.1%
EBITDA Margin	70.9%	74.2%	75.1%	73.6%	73.5%	82.8%	84.4%	85.9%	86.6%	87.5%
Pre-Tax Margin	44.2%	51.4%	39.3%	33.5%	39.1%	48.1%	44.3%	44.4%	43.7%	44.0%
Net Profit Margin	35.3%	41.2%	31.4%	26.8%	31.3%	38.5%	35.4%	35.5%	35.0%	35.2%
Return on Assets (RoA)	3.2%	3.7%	2.7%	1.9%	2.6%	3.8%	3.5%	3.6%	3.5%	3.7%
Return on Equity (RoE)	8.6%	11.3%	8.7%	6.4%	8.4%	12.3%	11.8%	12.2%	11.9%	12.1%
Return on Invested Capital (	5.7%	6.5%	4.8%	3.4%	4.3%	6.0%	5.6%	5.8%	5.7%	6.0%

Solvency (IPTO)	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
D/A	0.28	0.35	0.38	0.39	0.38	0.39	0.40	0.41	0.41	0.40
D/E	0.75	1.07	1.21	1.30	1.24	1.27	1.35	1.37	1.40	1.31
Net Debt/EBITDA	1.30	3.52	4.65	5.63	4.78	4.04	4.20	4.16	4.34	4.06
Interest Coverage Ratio	5.57	6.84	3.94	2.99	4.30	6.57	6.03	5.97	5.77	5.75

Liquidity (IPTO)	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
Current Ratio	1.71	1.77	2.24	2.02	2.00	1.95	1.89	1.83	1.75	1.92
Quick Ratio	1.61	1.67	2.10	1.84	1.78	1.72	1.64	1.55	1.45	1.60
Cash Ratio	0.98	1.08	1.37	1.11	1.06	1.00	0.93	0.85	0.75	0.92

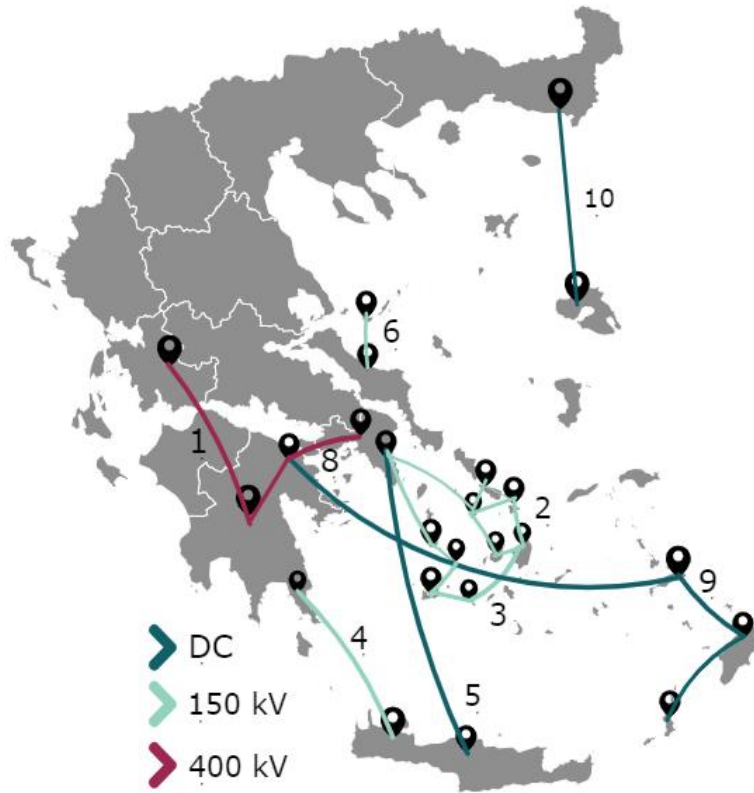
Source: Company's Financial Statements, Team Analysis

## Appendix 11: IPTO DuPont Analysis

Inputs	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Net Income	61,738	85,870	92,742	132,038	104,946	78,976	108,773	175,130	177,617	196,976
Sales	256,489	249,235	262,504	320,858	334,015	294,738	347,333	454,760	501,322	554,678
Total Assets	3,738,683	3,112,595	2,900,019	3,526,913	3,853,906	4,107,195	4,223,271	4,641,924	5,072,108	5,466,589
Common Equity	967,214	1,028,008	1,077,816	1,163,483	1,202,409	1,228,913	1,298,198	1,418,942	1,508,993	1,617,161
Outputs	2017a	2018a	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f
Net Profit Margin	24.1%	34.5%	35.3%	41.2%	31.4%	26.8%	31.3%	38.5%	35.4%	35.5%
Total Asset Turnover	6.9%	8.0%	9.1%	9.1%	8.7%	7.2%	8.2%	9.8%	9.9%	10.1%
Equity Multiplier	386.5%	302.8%	269.1%	303.1%	320.5%	334.2%	325.3%	327.1%	336.1%	338.0%
<b>Return on Equity (RoE)</b>	<b>6.4%</b>	<b>8.4%</b>	<b>8.6%</b>	<b>11.3%</b>	<b>8.7%</b>	<b>6.4%</b>	<b>8.4%</b>	<b>12.3%</b>	<b>11.8%</b>	<b>12.2%</b>

Source: Company's Financial Statements, Team Analysis

## Appendix 12: IPTO New Projects Map



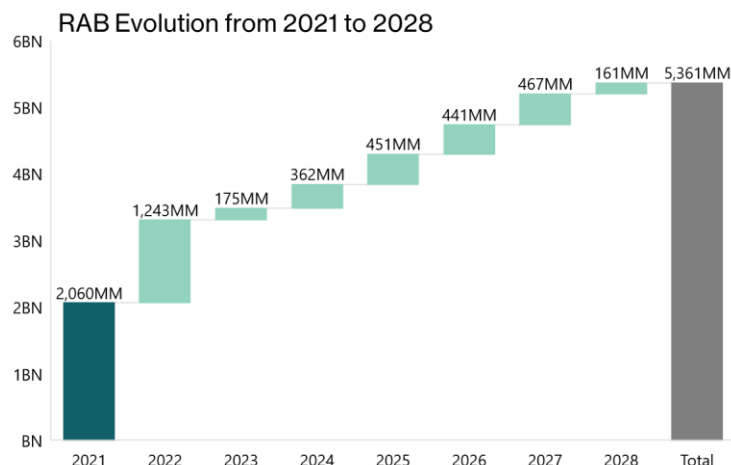
## Appendix 13: Projects Estimated Costs

ID	Project Description	Expected Commissioning	Project Cost in € K ('19e - '28f)
<b>1 &amp; 8</b>	Peloponnese Upgrade to 400kV	2024	175,500
<b>2</b>	Cyclades Phase B & C	2020	156,100
<b>3</b>	Cyclades Phase D	2024	375,600
<b>4</b>	Crete - Peloponnese	2020	401,600
<b>5</b>	Crete - Attica (Ariadne)	2023	918,200
<b>6</b>	Skiathos Interconnection	2021	55,300
<b>7</b>	HVC Substations	2025	205,000
<b>9</b>	Dodecanese	2027	1,545,000
<b>10</b>	NE Aegean Interconnection	2028	1,000,000
<b>11</b>	Other Projects		285,000
<b>Total Cost</b>			<b>5,117,300</b>
<b>Subsidies</b>			<b>1,000,000</b>
<b>Cap Ex</b>			<b>4,117,300</b>

# Appendix 14: RAB Method

RAB Method	Value (in € K)
<b>IPTO RAB FY 2020f+ Work In Progress</b>	2,202,459.43
<b>(-) Net Debt FY 2020f</b>	662,940.83
<b>(-) Provisions FY 2020f</b>	77,805.00
<b>(+) Associates</b>	-
<b>(-) Minorities</b>	-
<b>Equity Value IPTO</b>	1,461,713.61
<b>ADMIE Holding's Stake(percentage)</b>	51%
<b>ADMIE Holding's Stake</b>	745,473.94
<b>ADMIE Holding net Cash FY 2020f</b>	7,941.96
<b>Equity Value ADMIE Holding</b>	753,415.90
<b># of Shares FY 2020f</b>	231,993
<b>Equity Value per share</b>	€ 3.25
<b>Weighting</b>	40%

Source: Team Analysis



Source: Team Analysis

# Appendix 15: DCF Model

FCF to the Firm	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
Operating Cash Flows	215,830.52	232,439.31	185,943.66	230,402.42	335,003.55	377,219.04	424,662.15	455,304.58	499,643.50
CAPEX	605,661.45	428,636.91	455,039.83	246,813.66	592,378.64	648,418.71	643,632.91	696,281.81	342,201.06
<b>Unlevered FCFF</b>	<b>(389,830.94)</b>	<b>(196,197.61)</b>	<b>(269,096.16)</b>	<b>(16,411.25)</b>	<b>(257,375.08)</b>	<b>(271,199.68)</b>	<b>(218,970.76)</b>	<b>(240,977.23)</b>	<b>157,442.44</b>
Year Fraction	0.92	1.92	2.92	3.92	4.92	5.92	6.92	7.92	8.92
Discount Factor	0.87	0.84	0.81	0.78	0.75	0.72	0.69	0.67	0.64
<b>WACC</b>	<b>4.66%</b>	<b>4.21%</b>	<b>3.78%</b>	<b>3.91%</b>	<b>4.01%</b>	<b>3.86%</b>	<b>3.93%</b>	<b>3.80%</b>	<b>3.86%</b>
<b>PV of FCFF</b>	<b>(340,831.39)</b>	<b>(164,607.48)</b>	<b>(217,554.66)</b>	<b>(12,769.00)</b>	<b>(192,526.46)</b>	<b>(195,324.76)</b>	<b>(151,739.75)</b>	<b>(160,874.39)</b>	<b>101,202.93</b>

Source: Team Analysis

Terminal Value Calculation	
<b>Terminal Growth</b>	1.28%
TV of 2029F	6,185,509.38
TV Using Multiples	5,231,059.57
Average TV	5,708,284.48
PV of Average TV	3,669,246.37
<b>Enterprise Value</b>	<b>2,334,221.41</b>
(+) Cash	578,019.33
(-) Debt	1,240,960.15
(=) Equity Value	1,671,280.59
<b>Holding's Share</b>	<b>852,353.10</b>
Add: Cash	7,941.96
Less: Debt&Costs	5,000.00
<b>Discounted Equity Value</b>	<b>727,000.80</b>
# Holding's Shares Outstanding	231,993.00
<b>Implied Fair Stock Price</b>	<b>3.13</b>

Source: Team Analysis

DCF WACC Components	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
<b>Risk Free</b>	-0.3%	-0.1%	0.1%	0.2%	0.4%	0.6%	0.7%	0.9%	1.1%
<b>MRP</b>	5.72%	5.55%	5.39%	5.22%	5.06%	4.89%	4.73%	4.56%	4.40%
<b>beta Asset</b>	0.31	0.30	0.31	0.36	0.38	0.38	0.39	0.39	0.40
<b>D/E</b>	106.7%	120.7%	130.1%	123.7%	127.0%	134.8%	137.0%	140.3%	131.2%
<b>beta Equity</b>	0.56	0.60	0.63	0.72	0.77	0.79	0.82	0.84	0.82
<b>CRP</b>	4.1%	3.4%	2.8%	2.5%	2.5%	2.2%	2.2%	1.8%	1.8%
<b>CAPM</b>	7.1%	6.6%	6.3%	6.5%	6.8%	6.6%	6.8%	6.5%	6.5%
<b>Cost of Debt</b>	3.2%	2.8%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
<b>Tax Rate</b>	24.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
<b>D/(D+E)</b>	51.6%	54.7%	56.5%	55.3%	55.9%	57.4%	57.8%	58.4%	56.8%
<b>WACC</b>	<b>4.66%</b>	<b>4.21%</b>	<b>3.78%</b>	<b>3.91%</b>	<b>4.01%</b>	<b>3.86%</b>	<b>3.93%</b>	<b>3.80%</b>	<b>3.86%</b>

Source: Bloomberg, Team Analysis

# Appendix 16: Multiples Approach

Company	Market Cap	Price	Adj. Beta	EPS	EBITDA Margin	P/E	EV/EBITDA	Enterprise Value	Assets 3Q19
IPTO SA, Greece	€ 1,128,122,824	€ 2.48	0.573	0.145	75.55%	17.09x	7.39x	1,129,363,784	2,900,019,311
Transelectrica, Romania	€ 1,649,250,000	€ 22.50	0.693	1.820	17.47%	12.36x	3.05x	1,421,300,000	913,588,000
REN SGPS SA, Portugal	€ 1,874,832,000	€ 2.81	0.658	0.178	64.89%	15.79x	9.46x	4,417,820,000	5,277,688,000
Fluxys NV, Belgium	€ 2,050,532,040	€ 28.50	0.487	0.813	55.68%	35.92x	12.86x	1,556,060,000	2,881,711,000
Red Electrica SA, Spain	€ 10,188,913,000	€ 18.33	0.637	1.246	78.04%	15.11x	9.14x	14,742,820,000	11,468,974,000
Terna S.p.A., Italy	€ 11,678,100,000	€ 5.81	0.732	0.378	74.87%	15.37x	11.47x	20,290,430,000	17,130,500,000
<b>Average</b>	€ 5,488,325,408	€ 15.59	0.641	0.89	58.19%	18.91x	9.20x	8,485,686,000	7,534,492,200
<b>Median</b>	€ 2,050,532,040	€ 18.33	0.658	0.81	64.89%	15.37x	9.46x	4,417,820,000	5,277,688,000
<b>Minimum</b>	€ 1,649,250,000	€ 2.81	0.487	0.18	17.47%	12.36x	3.05x	1,421,300,000	913,588,000
<b>Maximum</b>	€ 11,678,100,000	€ 28.50	0.732	1.820	78.04%	35.92x	12.86x	20,290,430,000	17,130,500,000

Source: Bloomberg, Team Analysis

Multiples Valuation	P/E	EV/EBITDA
Median	15.37x	9.46x
IPTO SA Earnings 20' est	132,038,129	237,992,049
Debt '20	-	1,240,960,154
Cash & Cash eq '20	-	578,019,328
IPTO SA EV	-	2,251,404,785
IPTO Value	2,020,183,370	1,588,463,959
Admie Holding Stake	51%	51%
<b>Admie Holding Value</b>	<b>1,030,293,519</b>	<b>810,116,619</b>
# Admie Holding Shares	231,993,000	231,993,000
<b>Price</b>	<b>4.44</b>	<b>3.49</b>

Final Price	
P/E Price	4.44
P/E Weight	50%
EV/EBITDA Price	3.49
EV/EBITDA Weight	50%
<b>Final Price</b>	<b>3.97</b>

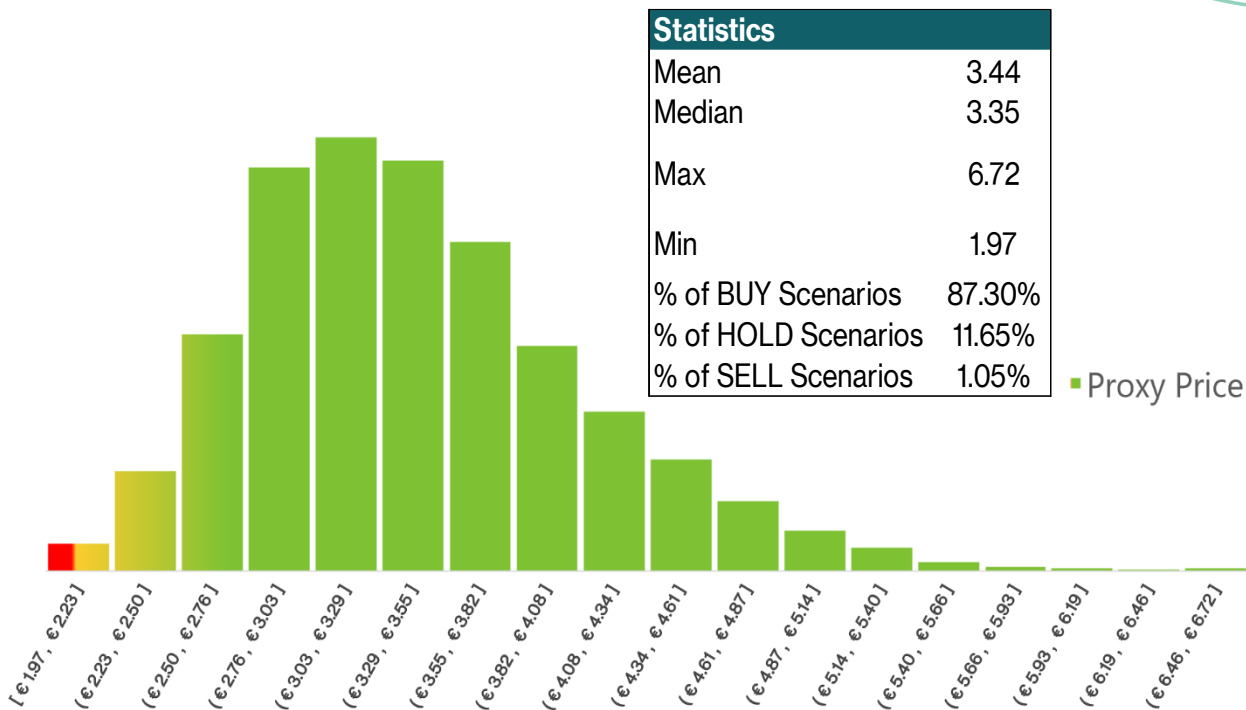
# Appendix 17: Dividend Discount Model

Dividend Discount Model	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
IPTO Dividends/Share	0.133	0.115	0.087	0.120	0.192	0.195	0.217	0.226	0.244
Year Fraction	0.92	1.92	2.92	3.92	4.92	5.92	6.92	7.92	8.92
Cost of Equity (CAPM)	7.05%	6.63%	6.32%	6.49%	6.78%	6.58%	6.79%	6.53%	6.49%
Discount Factor	0.855	0.802	0.754	0.708	0.663	0.622	0.583	0.547	0.514
Discounted Dividends	0.114	0.092	0.065	0.085	0.128	0.121	0.126	0.124	0.125

Terminal Value Calculation	
Terminal Growth	1.28%
Terminal Dividend (Gordon's Model)	€ 4.75
PV of TV	€ 2.44
<b>Target Price</b>	<b>€ 3.42</b>

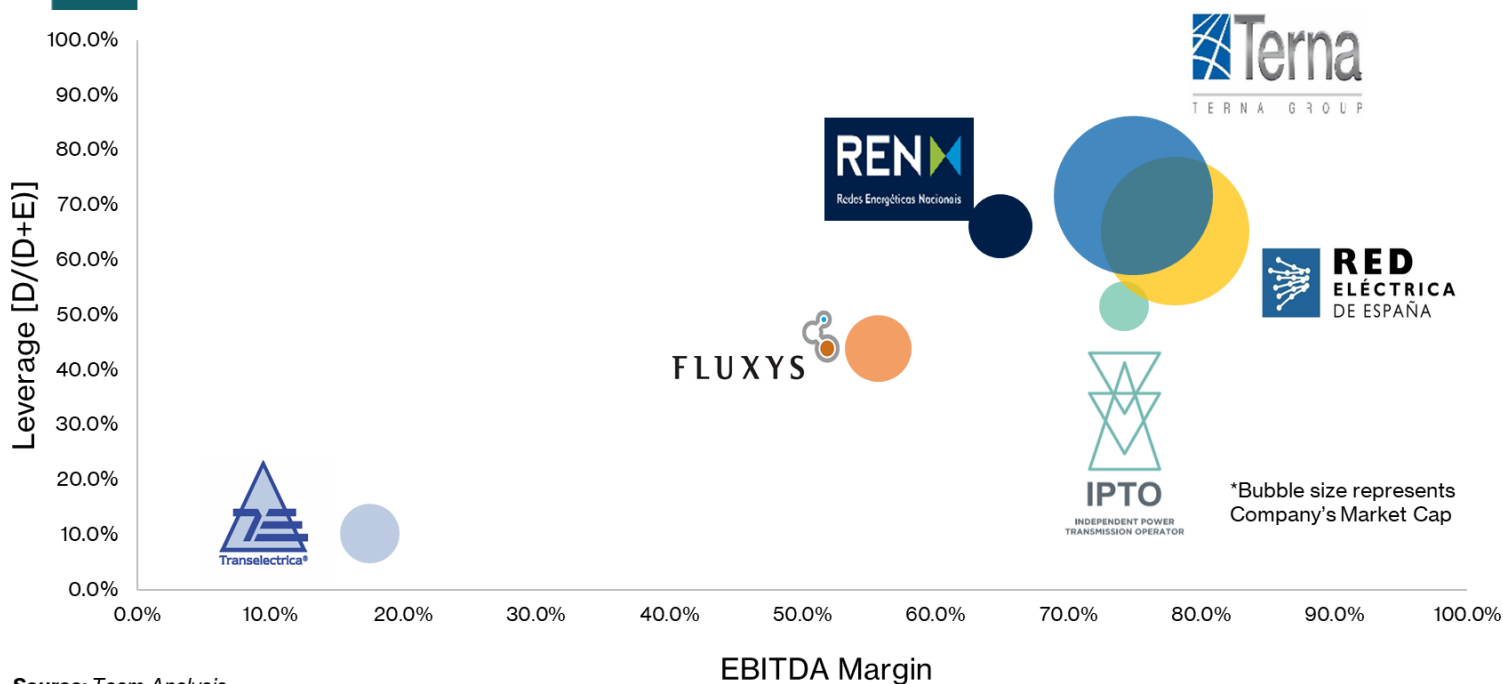
Source: Team Analysis

# Appendix 18: Monte Carlo Simulation



Source: Team Analysis

# Appendix 19: Multiples Analysis



Source: Team Analysis

# Appendix 20: Debt Structure & Financing Costs

In thousand €	2019e	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f
<b>Borrowing Rate pre 2018</b>	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
<b>Rate ICBC, BoC</b>	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
<b>Rate EIB</b>	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%
<b>Rate of Post 2018 Loans</b>	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
<b>Old Loans</b>	220,266.0	220,266.0	110,133.0	-	-	-	-	-	-	-
<b>ICBC, Bank of China</b>	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0	199,000.0
<b>European Investment Bank</b>	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0	270,000.0
<b>Post 2018 loans</b>	126,513.0	664,637.2	985,349.4	1,132,196.6	1,139,867.5	1,335,878.8	1,567,942.8	1,749,955.5	1,953,366.6	1,953,366.6
<b>Principal Repayment</b>	-	110,133.0	110,133.0	-	-	-	-	-	-	-
<b>Total Loans</b>	812,969.0	1,240,960.2	1,451,539.4	1,598,386.6	1,606,057.5	1,802,068.8	2,034,132.8	2,216,145.5	2,419,556.6	2,419,556.6
<b>Cost of Debt</b>	<b>3.27%</b>	<b>3.18%</b>	<b>2.76%</b>	<b>2.28%</b>	<b>2.28%</b>	<b>2.29%</b>	<b>2.30%</b>	<b>2.31%</b>	<b>2.32%</b>	<b>2.32%</b>
<b>Interest Expenses</b>	26,584.6	39,499.6	40,038.0	36,403.7	36,587.8	41,292.1	46,861.6	51,229.9	56,111.8	56,111.8

Source: Company Data, Team Analysis

Interest Coverage Ratio	Rating	Spread
> 8.5x	Aaa/AAA	0.40%
6.5 - 8.5x	Aa2/AA	0.70%
5.5 - 6.5x	A1/A+	0.90%
4.25 - 5.5x	A2/A	1.00%
3 - 4.25x	A3/A-	1.20%
2.5 - 3x	Baa2/BBB	1.75%
2.25 - 2.5x	Ba1/BB+	2.75%
2 - 2.25x	Ba2/BB	3.25%
1.75 - 2x	B1/B+	4.00%
1.5 - 1.75x	B2/B	5.00%
1.25 - 1.5x	B3/B-	6.00%
0.8 - 1.25x	C2/C	7.00%
0.65 - 0.8x	Ca2/CC	8.00%
0.2 - 0.65x	Caa/CCC	10.00%
< 0.2x	D2/D	12.00%

Source: NYU Stern

## IPTO's Cost of Debt

<b>Interest Coverage Ratio</b>	4.45x
<b>Synthetic Rating</b>	A2/A
<b>Spread</b>	1.00%
<b>GGB 10Y Yield</b>	1.40%
<b>Cost of Debt</b>	2.40%

# Appendix 21: PEST Analysis

P



## Political Factor

- The political environment in Greece is quite business friendly. In an attempt to attract investors, corporate tax was reduced from 28% to 24% in 2019 and it is expected to be further reduced at 20% in 2020. Additionally, dividend tax is expected to be reduced from 10% to 5%
- Under the new National plan for Energy and climate full decarbonization of PPC and privatization of utility companies are underway.
- Government subsidies are granted to utility and energy companies allowing for more intensive expansion, and IPTO is no exception.

E



## Economic Factor

- Greece's financial performance during 2019 will allow IPTO to borrow with low interest rates to fund its Investment Plan.
- The energy market is becoming more competitive with expectations for energy prices coupling in Europe.
- Even though the shadow of recession is looming over developed markets, ADMIE Holding is already traded at significant discount and its risk/return relationship will remain appealing to investors.

S



## Social Factor

- IPTO's service is mostly unaffected by demographic factors. The need for electricity is universal across all social groups.
- IPTO's Investment Plan might disturb local communities with the creation of new substations. However, since the largest portion of these investments are underwater cables, the disturbance will most likely be minimal.
- Energy safety in hard-reaching parts of Greece is now achievable.

T



## Technological Factor

- Electricity Storage technology advances rapidly, a new market for IPTO which will be crucial in developing the energy policy of tomorrow.
- Investors show increased interest for Renewable Sources of Energy.
- Electricity consumption is bound to increase the following years, since electricity will be the primary source of energy towards more eco-friendly societies.

# Appendix 22: Porter's 5 Forces Analysis

## THREAT OF POTENTIAL ENTRANTS-NO THREAT

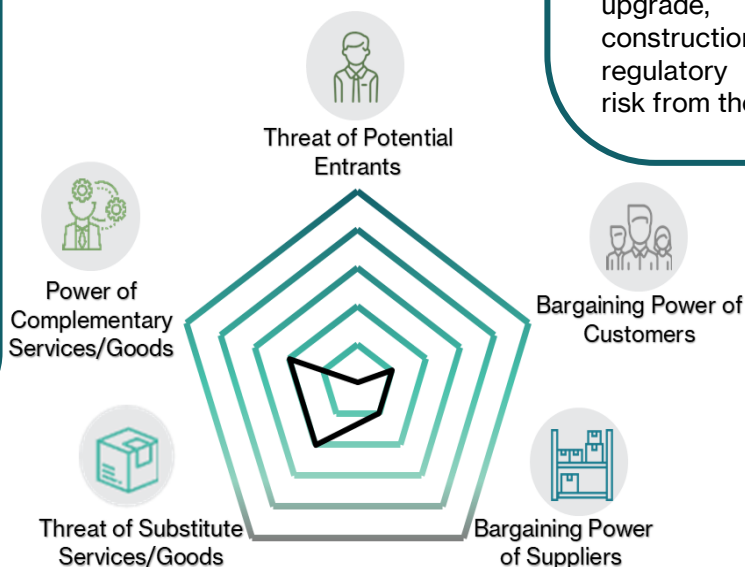
It is highly unlikely that the power transmission market will have any new entrants due to IPTO being a natural monopoly. The company is subject to RAE's regulatory framework under which IPTO is compensated for its expenses. New entrants would need to essentially sell below their breakeven point in order to compete with IPTO. This makes it almost impossible for potential competitors to be profitable, therefore resulting in very high entry barriers.

## BARGAINING POWER OF SUPPLIERS-NO THREAT

IPTO's suppliers are the power-transmission cable manufacturers and the energy providers at the clearing market. However, due to IPTO being an intermediary with no profit at the latter market, the supplier's negotiating power risk is passed on to the buyers. The transmission system consists of assets like HVC and cables, the construction of whose IPTO contracts to manufacturing companies. The company is compensated for any capital expenditure regarding the transmission system's upgrade, once the assets under construction are electrified. Given the regulatory framework, IPTO opposes no risk from the suppliers' side.

## POWER OF COMPLEMENTARY SERVICES/GOODS-LOW

Since electricity demand does not affect the company's revenues directly, changes in the demand of complementary goods like electronic devices will not play an important role in determining IPTO's income.



## THREAT OF SUBSTITUTE SERVICES/GOODS-LOW

Oil, gas and renewable energy sources are the alternatives to electricity consumption. According to RAE's regulation, IPTO's revenues are based on its RAB, therefore will remain unaffected by changes in electricity demand directly.

**Source:** IPTO's Financial Statements, Bloomberg, Team Analysis

## BARGAINING POWER OF CUSTOMERS - LOW

IPTO has two kinds of customers that correlate to its main business sectors. Every household or company that wishes to have access to electricity pays a periodic fee to their respective power providers. The bill includes (amongst others) charges for electricity, transmission, distribution, public interest services and renewables subsidies. Consumers may only negotiate the electricity charge, since it is the sole component that depends on the provider. The transmission charge, the major portion of IPTO's revenues, is determined by RAE and since the electricity bill is not divisible, power consumers are obliged to pay for it. After the provider collects the total fee, it allocates the portions of transmission and distribution to the respective operators. There has only ever been one incident where an energy provider company refused to pay IPTO its share and was legally prosecuted (Energia case). Therefore, we believe that although the risk is present, there is a very small possibility of such future cases. On the other hand, the buyers at the energy clearing market negotiate directly with the supplier for the final price. IPTO provides mediation service between the two from which the company claims no profit. That being said, the energy suppliers undertake any risk associated with the buyers' attempt to secure a better price.



## STRENGTHS

- **Control:** ADMIE Holding is the only company that has major control over the only Independent Power Transmission Operator in Greece, and IPTO is a natural monopoly.
- **Highly specialized workforce:** Skilled and experienced staff and management.
- **Stable revenue streams:** Income and Dividends are almost guaranteed because of IPTO's remuneration methodology.

S



## WEAKNESSES

- **Lack of Diversification:** High Dependency on IPTO's future Investments.
- **Dependency on the Government and RAE:** ADMIE Holding and IPTO are very politically and legally dependent due to the State's 51% control and the regulatory framework.
- **Strong Involvement in IPTO affairs by the strategic Investor:** Disproportionate management rights with respect to ownership percentage.

W

O

## OPPORTUNITIES

- **Renewables:** RES expansion will increase IPTO's investments further, as new powerplants will be connected to the grid.
- **New Markets:** Intrusion to new markets such as electricity storage and telecommunications, accompanied by expansion in other countries
- **Acceleration of Investments:** Speeding up the 10year Investment Plan will enhance the value to stockholders while allowing more undertakings in a shorter window of time
- **Grid Tel.:** Infrastructure exists in an industry that creates opportunities continuously (5G, optic fiber, etc.)



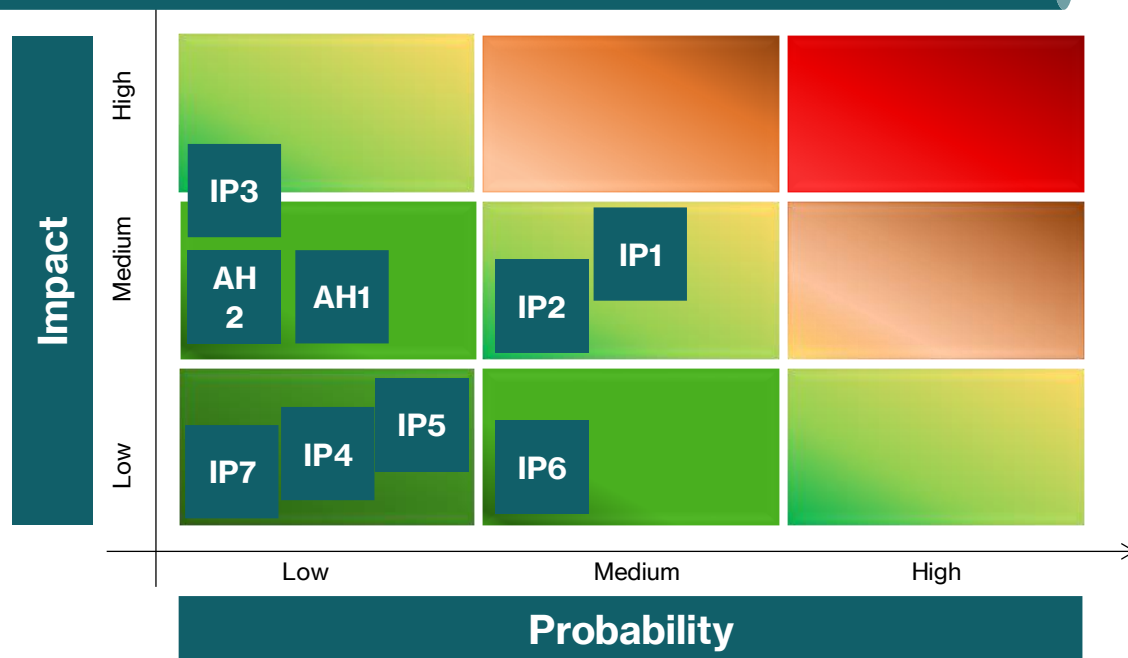
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## THREATS

- **Implementation of new framework:** Changes to the Regulatory Framework or taxation that might negatively impact IPTO's revenue calculation methodology.
- **Human Resources:** Loss of Human Capital and difficulty of replacement could hinder IPTO's abilities to execute its investments.
- **Deferments:** Possible delays of the 10year Investment Plan will have a negative influence in IPTO's Free Cash Flows.



## Appendix 24: Risk Matrix



## Appendix 25: Altman's Z-Score Analysis

Inputs	2014	2015	2016	2017	2018	2019
Working Capital	(142,922)	(107,156)	(130,472)	336,390	481,780	349,334
Retained Earnings	148,576	338,267	224,878	286,615	339,049	388,856
EBIT	130,600	93,023	88,790	107,658	115,420	131,266
Market Value of Equity	1,027,982	1,013,957	898,070	967,214	1,028,008	1,077,816
Revenues	312,558	264,601	248,613	256,489	249,235	262,504
Total Assets	2,626,843	2,749,412	2,854,498	3,738,683	3,112,595	2,900,019
Total Liabilities	1,598,860	1,735,457	1,956,429	2,771,470	2,084,588	1,822,204

Outputs	2014	2015	2016	2017	2018	2019	Coefficients
X1 = Working Capital / Total Assets	-0.05	-0.04	-0.05	0.09	0.15	0.12	1.2
X2 = Retained Earnings / Total Assets	0.06	0.12	0.08	0.08	0.11	0.13	1.4
X3 = EBIT / Total Assets	0.05	0.03	0.03	0.03	0.04	0.05	3.3
X4 = Market Value of Equity / Total Liabilities	0.64	0.58	0.46	0.35	0.49	0.59	0.6
X5 = Revenues / Total Assets	0.12	0.10	0.09	0.07	0.08	0.09	1
<b>Z-Score</b>	<b>0.68</b>	<b>0.68</b>	<b>0.52</b>	<b>0.59</b>	<b>0.84</b>	<b>0.93</b>	

### Z-SCORE INTERPRETATION

Z > 2.99: "Safe zone"  
 1.79 < Z < 3: "Gray zone"  
 Z < 1.8: "Distress zone"

With IPTO's Z-Score never surpassing 1 from 2014 to 2019, one could state that, according to this metric, the company has a very high probability of declaring bankruptcy in the imminent future. However, since IPTO's fundamentals are quite different than those of a typical manufacturing company, the results are misleading. Evidently the measures X1, X2, X3 and X5 are very low due to the IPTO's total assets disproportional ratio to its working capital, revenues, EBIT and retained earnings respectively, due to its function as a TSO. Measure X4 is more in line with that of a typical company, however it also holds the lowest weight. IPTO's key financial metrics paint a widely different image about the company's profitability, solvency and bankruptcy probability.

Source: Company's data, Team Analysis

# Appendix 26: Beneish M-Score Analysis

Inputs	2014	2015	2016	2017	2018	2019
Revenues	312,558	264,601	248,613	256,489	249,235	262,504
Cost of Goods Sold	-	-	-	-	-	-
Selling, General, & Admin. Expense	126,262	85,479	87,743	79,985	92,824	82,039
Depreciation	53,195	61,739	63,206	64,317	67,342	54,899
Net Income from Continuing Operations	69,974	35,546	(2,674)	61,738	85,870	92,742
Accounts Receivable	932,639	923,173	901,414	1,312,425	779,171	308,073
Current Assets	1,089,096	1,151,587	1,237,134	2,131,272	1,436,311	844,448
Property, Plants, & Equipment	1,537,444	1,597,698	1,583,880	1,580,899	1,671,314	2,050,555
Long Term Investments	-	-	-	-	-	-
Total Assets	2,626,843	2,749,412	2,854,498	3,738,683	3,112,595	2,900,019
Current Liabilities	1,232,018	1,258,743	1,367,606	1,794,882	954,531	495,114
Total Long-term Debt	88,023	126,000	145,000	520,361	623,186	738,661
Cash Flow from Operations	203,547	221,134	207,514	626,334	(195,678)	182,521

Financial Ratios	2014	2015	2016	2017	2018	2019
Day Sales in Receivables Index (DSRI)	1,089.12	1,273.46	1,323.41	1,867.66	1,141.08	428.36
Gross Margin Index (GMI)	1.00	1.00	1.00	1.00	1.00	1.00
Asset Quality Index (AQI)	-1.00	-1.00	-0.99	-0.99	-1.00	-1.00
Sales Growth Index (SGI)	312,558.00	264,601.00	248,613.00	256,489.00	249,235.00	262,503.98
Depreciation Index (DEPI)	0.03	0.04	0.04	0.04	0.04	0.03
Selling, General, & Admin. Expenses Index (SGAI)	0.40	0.32	0.35	0.31	0.37	0.31
Leverage Index (LVGI)	0.50	0.50	0.53	0.62	0.51	0.43
Total Accruals to Total Assets (TATA)	-0.05	-0.07	-0.07	-0.15	0.09	-0.03

M-Score Indices	Coefficients					
DSRI Index	1.17	1.04	1.41	0.61	0.38	0.92
GMI Index	1.00	1.00	1.00	1.00	1.00	0.53
AQI Index	1.00	0.99	1.00	1.01	1.00	0.40
SGI Index	0.85	0.94	1.03	0.97	1.05	0.89
DEPI Index	1.11	1.03	1.02	0.99	0.67	0.12
SGAI Index	0.80	1.09	0.88	1.19	0.84	-0.17
LVGI Index	1.00	1.05	1.17	0.82	0.84	-0.33
TATA Index	1.33	1.09	2.05	-0.60	-0.34	4.68
Constant	-4.84	-4.84	-4.84	-4.84	-4.84	1.00
<b>Beneish M Score IPTO</b>		3.80	2.57	7.49	-5.64	-4.57

## Interpretation

Beneish M Score < -2.22: Company is not likely to have manipulated their earnings

Beneish M Score > -2.22: Company is likely to have manipulated their earnings

## BENEISH M-SCORE INTERPRETATION

Upon examining IPTO's Beneish M-Score we can see that IPTO is not likely to have manipulated its earnings after 2018, while the opposite can be said from years 2015 to 2017. One might indicate that the sharp change from 2017 to 2018 is an indication of malpractice the years prior. The improvement on the company's M-Score is in line foundation of ADMIE Holding in 2017 and IPTO's secession from PPC, and a sign that IPTO in its current state is not an earnings manipulator. This comes to no surprise; since IPTO's Allowed and Required revenue are public information, and the company's OpEx are comprised of its relatively stable personnel costs there is not much room for accounting "tricks". The situation before 2017 can easily be explained as well. TATA, the most heavy-weighted parameter of Beneish M-score -and the one that fluctuates more in IPTO's case as well-, includes the change in, amongst other accounts, IPTO's receivables and payables. However, these are not tied to the company's operation, but include Utility Bills accounts from PPC. As such, they reflect an "anomaly" in the calculation of Beneish M-Score for IPTO's case specifically and are not a sign of earnings manipulation.

# Appendix 27: Electricity Grid Market Operators



**RAE:** The Regulatory Authority for Energy bears the responsibility of supervising the domestic energy market, aiming to establish the mechanisms of liberated markets and aiding the long-term strategical goals of energy policy, always in favor of the public interest. As such, RAE is affecting IPTO's development in a variety of ways, the two most important of them being the approval of IPTO's ten-year development plan and of its allowed revenue. Even though IPTO is an "independent" organization, its activity is heavily regulated by RAE, resulting to a variety of restrictions to its core operational and investment activities.

**PPC:** The Public Power Corporation is the biggest electricity producer and supplier in Greece, with its market share approximating 70%. Aiming to the liberalization of electricity markets the Greek State separated the functions of transmission and distribution from PPC with the foundation of IPTO (2011), HEDNO (2011) and ADMIE Holding (2017). For further privatization of Greece's electricity markets PPC is forced to reduce its market share to less than 50% by the end of 2020 and close its lignite plants by the end of 2028.



Public Power Corporation S.A.- Hellas  
Energy for everyone



**HEMO:** Owned by PPC, the Hellenic Electricity Market Operator is responsible for running and monitoring the Day-Ahead market and Intraday coupling. Additionally, HEMO clears, settles and reports these transactions to the Regulatory Authority for Energy (RAE). Once HEnEx is fully operational -established in 2019 for Greece's Energy Market to adopt the Target model-, HEMO will additionally operate the Forward, Intraday and Day-Ahead Markets.

**IPTO:** The Independent Transmission System Operator is responsible for electricity transmission, from Power Plants to the distribution network, with regards to safety and energy efficiency. Additionally, IPTO is promoting competition within Greece's electricity market and the non-discriminatory treatment of System users. It also cooperates with HEMO for Intraday energy clearance and load management. With the implementation of the Target model IPTO will remain in charge of the Balancing Market, aiding HEnEx.



**HEDNO:** The Hellenic Electricity Distribution Network Operator is a 100% subsidiary of PPC S.A. tasked with development, maintenance and operation of Greece's power distribution network. While its owned by PPC it remains independent in operation and management as required by its legislative framework. Since HEDNO is responsible for electricity distribution its facilities are connected with IPTO's cables from which medium voltage current is transferred to be transformed once more before its ready for household consumption. In early 2019 HEDNO and IPTO signed a memorandum of cooperation within the EU's CoordiNET program, aiming to improve scattered production units' integration in the distribution system.

# Appendix 28: Fixed Assets Analysis

To determine the Net Fixed Assets' development y-o-y in relation to IPTO's investment plan we kept track of each asset category and distributed the finalization of investments (from WIP to Tangible Fixed Assets) and depreciation accordingly.

**Finalization of Investments:** Depending on the nature of the projects-as described in the investment plan- we determined whether the assets would be finalized at the end of each project or if the investment of each year would be finalized within the year. This separation is pivotal to properly attribute the depreciation to each asset category. We calculated a historical average for the contribution of each asset as a percentage of Total Fixed Assets. Each year's finalization is then attributed to the asset category -with the exception of land-.

**Depreciation rate calculation:** We then had to determine the depreciation rate of each asset category. For the assets prior to the Investment plan, we calculated the effective depreciation rate from the financial statements (Figure 43). For the assets that would be constructed through the Investment Plan we used the 1/Useful Life(years) formula for each asset category as stated in IPTO's financial statements. The depreciation rate of each year for each asset category is the weighted average of the previous rates weighted with the ratio of Old/New Gross Assets (Figure 44).

**Fixed Assets Development:** Each year the Net Tangible Fixed Assets are increasing due to the positive effect of the investments finalization and decreasing due to depreciation. Since most of the Investment Plan's projects are finalized within the 10year duration, the effect on Net Tangible Fixed Assets is overwhelmingly positive. The WIP is then added to this calculation, forming the Net Fixed Assets of each year. This account is used on the calculation of RAB, which is a structural component of IPTO's Allowed Revenue methodology.

**Figure 42 -Attribution of investment's finalization in each asset category**

	Buildings	Machinery and Equipment	Means of Transport	Furniture
2014	6.9%	70.5%	12.0%	10.3%
2015	18.9%	72.8%	0.4%	5.0%
2016	3.0%	85.7%	0.4%	7.6%
2017	1.7%	92.4%	3.9%	1.6%
2018	0.9%	98.7%	0.2%	0.3%
<b>Average</b>	<b>3.4%</b>	<b>92.9%</b>	<b>1.2%</b>	<b>2.0%</b>

Source: Company's Financial Statements

**Figure 43 -Effective Depreciation Rate**

	Buildings	Machinery Equipment	Means of Transport	Furniture
2014	4.5%	5.0%	13.0%	17.9%
2015	5.5%	6.1%	12.6%	19.3%
2016	5.1%	6.1%	11.4%	17.9%
2017	5.4%	6.1%	13.3%	13.3%
2018	5.4%	6.2%	9.4%	10.9%
<b>Avg</b>	<b>5.2%</b>	<b>5.9%</b>	<b>11.9%</b>	<b>15.9%</b>

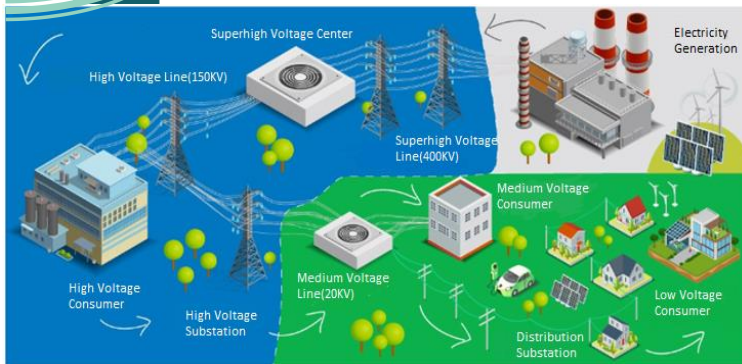
Source: IPTO's Financial Statements

**Figure 44-Estimated Depreciation Rate**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Buildings</b>	5.1%	4.1%	4.1%	4.1%	3.6%	3.3%	3.1%	3.0%	3.0%	2.8%
<b>Machinery and Equipment</b>	5.9%	4.9%	4.9%	4.8%	4.4%	4.1%	3.9%	3.9%	3.8%	3.7%
<b>Means of Transport</b>	11.8%	10.2%	10.1%	10.1%	9.3%	8.7%	8.5%	8.4%	8.3%	8.1%
<b>Furniture</b>	15.6%	10.8%	10.5%	10.4%	8.0%	6.5%	5.9%	5.5%	5.2%	4.5%

Source: Team's Estimations, IPTO's 10year Development Plan 2020-2029

## Appendices 29&30: Electricity Grid and Market Framework after Target Model

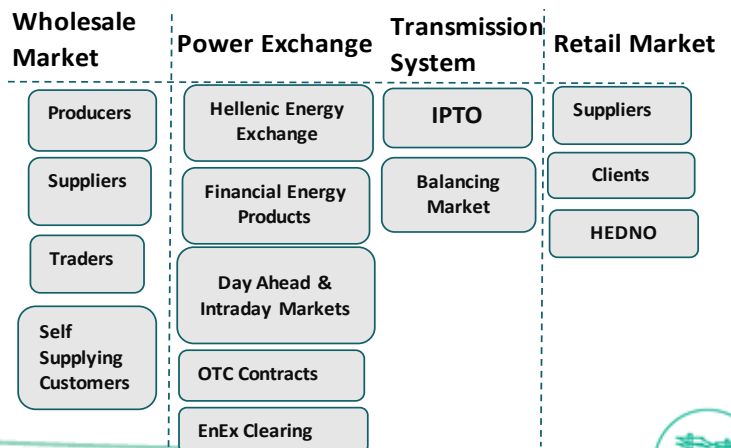


Source: HEMO

Producers/Suppliers

IPTO

HEMO



Source: HAEF

# Appendices 31&32: Corporate Governance Assessment

Corporate Governance Assessment on ADMIE Holding			
CRITERIA	DESCRIPTION	RATING	COMPANY POLICIES
<b>EXECUTIVE COMMITTEE</b>			
Independence	Boards must be willing and be able to effectively contemplate the company's strategy and management decisions.	1	The board of directors consists of 2 executive, 2 independent and non-executive members and 1 non-executive member. Consequently, 40% of the BoD is independent.
Accountability	Governance practices should reflect a board that is accountable to its owners.	3	Roles, responsibilities, and accountabilities of the board are distinctly summarized.
Responsiveness	Directors must be responsive to the wishes of its shareholders as expressed through elections or votes on shareholder proposals and respond accordingly.	2	The company stipulates the protection of the rights of shareholders, such as: 1. Right to vote on all matters 2. Right to vote by proxy. 3. Their consent or approval 4. Right to inspect corporate books and records 5. Right to information 6. Right to dividend.
Competence	Directors should add value through skills or expertise in a particular field.	3	Directors have excellent knowledge and expertise in the utility sector.
Elections	Annually elected directors.	0	The directors are elected every 3 years.
Elections	Majority voting in director elections.	3	Directors are elected through a plurality of votes.
Directorship	Reasonable number of board directorships.	2	There are 5 directors to the board for the year.
Board Members	Board of at least 5 but no more than 15 members.	2	The Board consists of 5 members.
Independent Members	Board must have greater of 2 independent directors or 20% independent members of the board.	2	The 40% of the BoD are independent directors.(2/5)
Role Delegation	Role of CEO and chair should be separate	0	Iason Roussopoulos is CEO and Chairman of the Board.
Committees	Established Executive, Audit, Compensation, Nominating, and Compliance Committee.	2	There are established Executive and Audit Committees.
<b>AVERAGE SCORE</b>		<b>1.82</b>	
<b>AUDIT COMMITTEE</b>			
Independent Audit	Board's Audit Committee should be independent	3	The audit committee is led by an independent, non-executive director Mr. Darousos, and 2 other independent members.
Independent Audit	Auditor should provide an impartial and professional opinion. Independence is compromised when the auditor receives significant payments for non-audit work.	3	The Audit overviews and monitors the independence of auditors or auditing firms and, in particular, the suitability of providing non-audit services to the company.
Integrity of Financials	Company's financials should have integrity. (Items that raise concerns include changes in auditors, irregularities over many years, material weaknesses in the company's controls, certain restatements, and excessive fees paid for non-audit work).	3	The Internal Audit, led by an independent member Mrs. Stamatiadou, the Internal Auditor conducts audits in order to evaluate the framework of policies, practices and procedures governing the organization and operation of the Company's Internal Audit Scheme (IAS) regarding the production and communication of financial, administrative and other information, among others.
<b>AVERAGE SCORE</b>		<b>3</b>	
<b>PROTECTION OF SHAREHOLDER RIGHTS</b>			
Shareholder Rights	One ordinary share equals one vote	3	Any shareholder of the Company is entitled to participate and eligible to vote at the Extraordinary General Meeting. Each ordinary share is entitled to one (1) vote.
Shareholder Rights	Right to Dividend	3	Shareholders are entitled to dividends subject to the discretion of the board
Shareholder Rights	Procedure for voting by proxy	3	Shareholders may participate in the General Meeting and may either vote in person or by proxy holders
Shareholder Rights	Minority Rights	3	Shareholders representing 1/20 of the paid-up share capital may request from the BoD of the Company to include in the General Meeting Agenda additional items.
Shareholder Rights	Minority Rights	3	Following a request of shareholders representing 1/5 of the paid-up share capital, which is communicated to the Company, the BoD must provide to the General Meeting information with respect to the course of the Company affairs and the financial situation of the Company.
Shareholder Rights	Access to Information	3	Following the request of any shareholder, communicated to the Company, the BoD must provide to the General Meeting, the requested specific information with respect to the Company's affairs.
<b>AVERAGE SCORE</b>		<b>3</b>	
<b>TOTAL AVERAGE SCORE</b>		<b>2.61</b>	
0	The company did not follow the criteria at all.		
1	The company did not follow the criteria.		
2	The company followed the criteria.		
3	The company has excellent policies on this criteria.		

Corporate Governance Assessment on IPTO	SCORE (out of 10)	WEIGHT	CALCULATION
<b>AUDIT AND RISK OVERSIGHT</b>	<b>10</b>	<b>25%</b>	<b>25%</b>
a. No regulatory initiated enforcement action against the company	yes		
b. No adverse opinion by the auditor in the past year	yes		
c. No regulatory initiated enforcement action against the company	yes		
d. No changes in audit firm due to invalid or questionable reasons	yes		
<b>BOARD STRUCTURE</b>	<b>8</b>	<b>35%</b>	<b>28%</b>
a. Presence of women on the Board	yes		
b. Board members that are not family affiliated	yes		
c. The majority of BoD should be independent	no		
d. The executives do not serve on an excessive number of outside boards	yes		
e. The CEO/Chairman does not serve on outside board	yes		
<b>SHAREHOLDER RIGHTS</b>	<b>8</b>	<b>25%</b>	<b>20%</b>
a. One share equals one vote	yes		
b. Has classes of stock with different voting rights, absolute voting right ceiling and ownership ceilings for specific parties	no		
c. Directors are elected annually	yes		
d. Has controlling shareholders and tag-along rights for minority	yes		
e. Right to Dividend	yes		
<b>COMPENSATION AND REMUNERATION</b>	<b>5</b>	<b>15%</b>	<b>7.5%</b>
a. Company discloses details on executives' remuneration	yes		
b. Has an equity-based compensation plan	no		
<b>TOTAL CORPORATE GOVERNANCE SCORE</b>	<b>7.75</b>	<b>100%</b>	<b>77.5%</b>
0-2	The company did not follow the criteria at all.		
2-4	The company did not follow the criteria.		
4-6	The company followed the criteria.		
6-10	The company has excellent policies on this criteria.		

# Appendix 33: IPTO Environmental Assessment

Company	Score	Grade
<b>Resources Use</b>		
NATIONAL GRID S.A	0.7	B+
RED ELECTRICA S.A	0.5	B-
Terna S.P.A	0.9	A
<b>IPTO S.A</b>	<b>0.1</b>	<b>D</b>
<b>Emmissions Reduction</b>		
NATIONAL GRID S.A	0.9	A
RED ELECTRICA S.A	0.7	B+
TERNA S.P.A	0.1	D
<b>IPTO S.A</b>	<b>0.5</b>	<b>B-</b>
<b>Innovation</b>		
NATIONAL GRID S.A	0.9	A
RED ELECTRICA S.A	0.4	C
TERNA S.P.A	0.4	C
<b>IPTO S.A</b>	<b>0.7</b>	<b>B+</b>
<b>Average on Peers</b>	<b>0.61</b>	<b>B</b>
<b>Average on IPTO</b>	<b>0.43</b>	<b>C</b>

Environmental Pillars					
Innovation		Resources Use		Emissions Reduction	
Take-back and Recycling Initiatives	Sustainable Building Products	Biodiversity Restoration Protection (Inactive)	Environmental Supply Chain Monitoring	CO2 Equivalent Emissions Direct 1,2,3	
Product Environmental Responsible Use	Renewable/Clean Energy Products	Electricity/Electricity Produced	Fresh Water Withdrawal Total	Climate Change Commercial Risks Opportunities	
Environmental Project Financing	Agrochemical 5 % Revenue	Electricity/Electricity Purchased	e-Waste Reduction Initiatives	Estimated CO2 Equivalents Emission Total	
Organic Products Initiatives	Product Impact Minimization	Energy Efficiency Initiatives (Inactive)	Hazardous Waste Reduction (Inactive)	Particulate Matter Emissions Reduction	
Animal Testing Cosmetics	Animal Testing Reduction	Energy Footprint Reduction (Inactive)	Renewable Energy Produced	Biodiversity Impact Reduction	
Labeled Wood	GMO Products	Waste Reduction Initiatives	Renewable Energy Use	Environmental Restoration Initiatives	
Hybrid Vehicles	Water Technologies	Waste Total	Water Withdrawal Total	Staff Transportation Impact Reduction	
Agrochemical Products	Eco-Design Products	Energy Use Total	Hazardous Waste	Emission Reduction Target Year	
Noise Reduction				Emissions Trading Environmental Partnerships ISO 14000 or EMS	

# Appendix 34: IPTO Social Assessment

Social Pillars				
Workforce Score	Community Score	Product Responsibility	Human Rights	
Policy Employee Health & Safety	Employee Health & Safety Training Hours	OECD Guidelines for Multinational Enterprises	Policy Customer Health & Safety	Fundamental Human Rights ILO UN
Training and Development Policy	Employee Lost Working Days	Product Sales at Discount to Emerging Markets	Policy Responsible Marketing	Human Rights Breaches Contractor
Policy Career Development	Lost Time Injury Rate Total	Bribery, Corruption and Fraud Controversies	Product Quality Controversies	Policy Freedom of Association
Policy Diversity and Opportunity	Employees Health & Safety Team	Policy Community Involvement	Product Responsibility Monitoring	Ethical Trading Initiative ETI
Targets Diversity and Opportunity	Announced Layoffs To Total Employees	Extractive Industries Transparency Initiative	Consumer Complaints Controversies	Policy Forced Labor
Supply Chain Health & Safety Training	Wages Working Condition Controversies	Employee Engagement Voluntary Work	Alcohol	Human Rights Policy
Average Training Hours	Training Hours Total	Policy Bribery and Corruption	Gambling	Policy Human Rights
Health & Safety Training	Training Costs Total	Whistleblower Protection	Obesity Risk	
Employee Fatalities	Policy Skills Training	Donations Total	Anti-Personnel Landmines	
Contractor Fatalities	Women Employees	Diseases of the Developing World	Healthy Food or Products	
Health & Safety Policy		Crisis Management Systems	Product Recall	
		Anti-competition Controversies	Policy Fair Trade	
		Improvement Tools Business Ethics		
		Corporate Responsibility Awards		
		Policy Fair Competition		
		Policy Business Ethics		

Company	Score	Grade
<b>Workforce</b>		
NATIONAL GRID S.A	0.2	D+
RED ELECTRICA S.A	0.9	A
TERNA S.P.A	0.2	D+
<b>IPTO SA</b>	<b>0.7</b>	<b>B+</b>
<b>Human Rights</b>		
NATIONAL GRID S.A	0.2	D+
RED ELECTRICA S.A	0.6	B
TERNA S.P.A	0.2	D+
<b>IPTO SA</b>	<b>0.6</b>	<b>B</b>
<b>Community</b>		
NATIONAL GRID S.A	0.2	C-
RED ELECTRICA S.A	0.7	B+
TERNA S.P.A	0.2	C-
<b>IPTO S.A</b>	<b>0.5</b>	<b>C+</b>
<b>Product Responsibility</b>		
NATIONAL GRID S.A	0.1	D
RED ELECTRICA S.A	0.4	C
TERNA S.P.A	0.8	A-
<b>IPTO S.A</b>	<b>0.8</b>	<b>A-</b>
<b>Average on Peers</b>	<b>0.39</b>	<b>C</b>
<b>Average on IPTO</b>	<b>0.65</b>	<b>B+</b>

# Appendix 35: IPTO Governance Assessment

Company	Score	Grade
<b>Management</b>		
NATIONAL GRID S.A	0.9	A
RED ELECTRICA S.A	0.7	B+
TERNA S.P.A	0.9	A
<b>IPTO</b>	<b>0.57</b>	<b>B-</b>
<b>Shareholders</b>		
NATIONAL GRID S.A	0.8	A-
RED ELECTRICA S.A	0.6	D
TERNA S.P.A	0.08	D-
<b>IPTO</b>	<b>0.71</b>	<b>B</b>
<b>CSR Strategy</b>		
NATIONAL GRID S.A	0.9	A+
RED ELECTRICA S.A	0.7	B+
TERNA S.P.A	0.8	A-
<b>IPTO</b>	<b>0.2</b>	<b>D+</b>
<b>Average on Peers</b>	<b>0.71</b>	<b>B+</b>
<b>Average on IPTO</b>	<b>0.49</b>	<b>C+</b>

Governance Pillars		
Management	Shareholders	CSR Strategy
Board Functions Policy	Shareholder Rights Policy	CSR Sustainability Committee
Corporate Governance Board Committee	Policy Equal Voting Right	Global Compact Signatory
Nomination Board Committee	Policy Shareholder Engagement	Stakeholder Engagement
Audit Board Committee	Different Voting Right Share	CSR Sustainability Reporting
Compensation Board Committee	Equal Shareholder Rights	GRI Report Guidelines
Board Structure Policy	Minimum Number of Shares to Vote	CSR Sustainability Report Global Activities
Policy Board Size	Director Election Majority Requirement	CSR Sustainability External Audit
Policy Board Independence	Shareholders Vote on Executive Pay	
Policy Board Diversity	Public Availability Corporate Statutes	
Policy Board Experience	Veto Power or Golden share	
Policy Executive Compensation Performance	State Owned Enterprise SOE	
Policy Executive Compensation ESG Performance	Supermajority Vote Requirement	
Policy Executive Retention	Golden Parachute	
Compensation Improvement Tools	Limited Shareholder Rights to Call Meetings	
Internal Audit Department Reporting	Advance Notice for Shareholder Proposals	
Succession Plan	Insider Dealings Controversies	
External Consultants	Accounting Controversies	
CEO-Chairman Separation		
CEO Board Member		
Chairman is ex-CEO		
Board Background and Skills		
Executive Compensation Policy		
Board Individual Re-election		