



Universal
100 YEARS

 **AmeriNic**

The Future of Nicotine

Sustainable, Compliant Nicotine
Production

Prepared for JUUL ^{LA}_{BS}

March 28, 2019

Quick Facts

Founded	1918
Stock Exchange	NYSE
Ticker	UVV
Revenues (as of 3/31/18)	\$2.0B
Dividend Yield	5.06%

Stock Price	
Recent Stock Price (02/26/19)	\$59.27
52 wk High	\$69.91
52 wk Low	\$46.45
Common Shares Outstanding	25.0M
48 years of consecutive annual common stock dividend increases	

Universal Has a Global Footprint



Operations in over 30 countries

We are experts in:

- Managing complex, dynamic supply chains
- Procurement
- Processing
- Storage
- Logistics
- Import/Export



Current Nicotine Supply Chain

- Tobacco dust is the raw material used for Nicotine extraction.
- Nicotine extraction units purchase tobacco dust from multiple Beedi scrap processors.
- Gujarat has 140 to 150 Beedi scrap processors.
- Scrap processing produces 9- 10% of tobacco dust.
- Scrap Processors procure tobacco scrap by different ways:
 - Direct from farmers
 - Thru brokers / middlemen.
 - From Cooperative Market yard auction.
- Raw material identity is lost once it reaches the Scrap Processors.
- Traceability of the raw material is not maintained by scrap processors, since it is all managed by small scale units & multiple vendors.



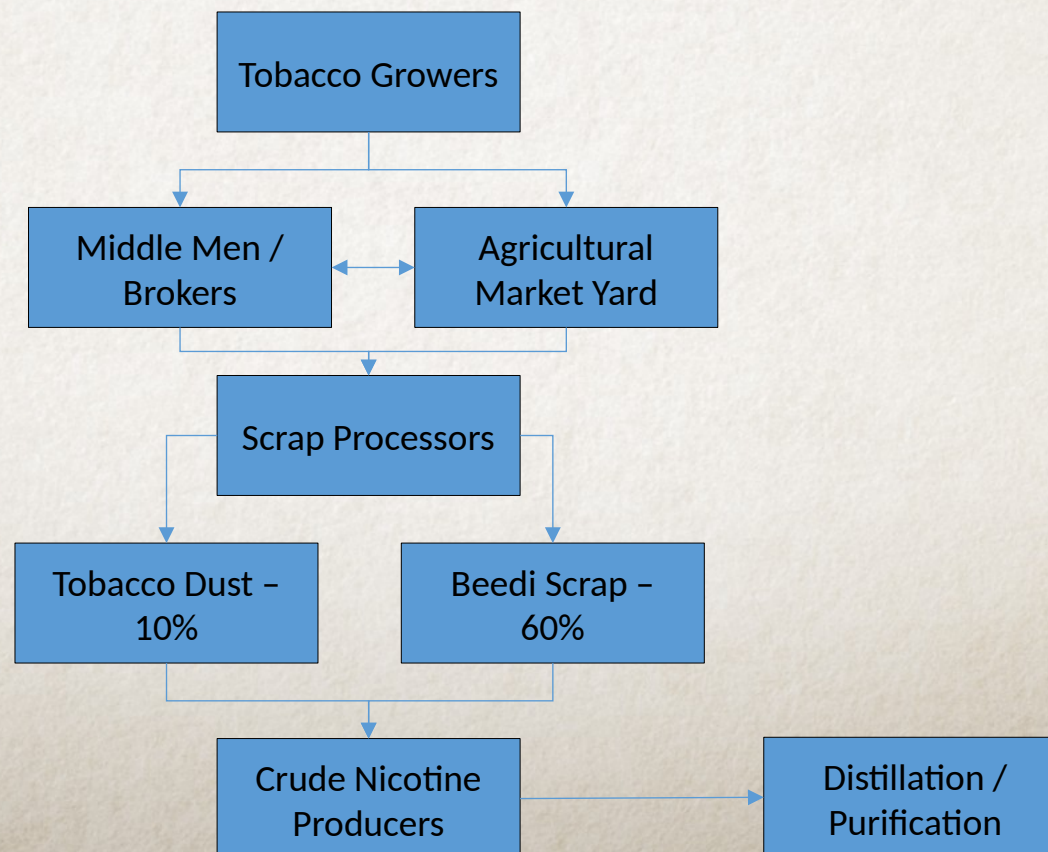
Cooperative
Market Yard

Scrap Auctions at Market Yard



Current Nicotine Supply Chain

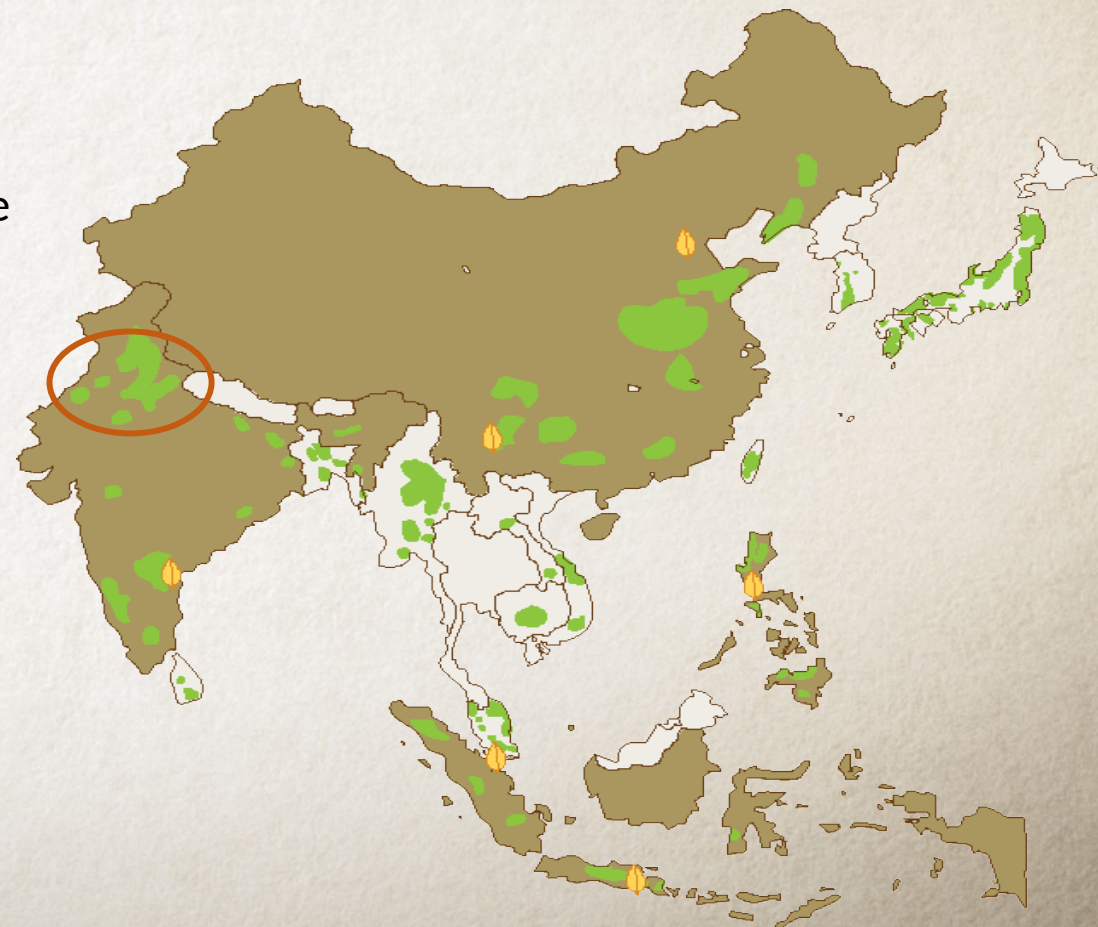
- Nicotine manufacturers purchase Beedi scrap for extraction.
- Loosely regulated market in India
- No traceability back to the farm
- India government is looking unfavorably at bidi cigarette consumption
- ALP Concerns



Current Nicotine Supply Chain

Current Initiatives

- We are working with our raw material suppliers to ensure adequate supply for 2019.
- Our Asia team is evaluating how to procure Beedi tobaccos to assist our suppliers.
 - Secure supply
- We are evaluating procuring Indian rustica tobaccos produced under contract to comply with GAP and other requirements.
- We continue to work with our suppliers to improve raw material quality



Universal Commitment to Sustainability and Product Integrity



Directly impacting more than

2,000,000

people in the farming areas
from which we purchase
tobacco

O V E R



30 Countries in which
we operate



20,000

Permanent and
seasonal employees



500,000

Farmers working
with Universal



300,000,000

Tree seedlings planted in last 10 years



2 Billion in revenue
For fiscal year 2018



45

Schools built or improved

27

Schools were given
Educational materials



370

Wells and boreholes
dug in Malawi, Mozambique, and
Tanzania in the last 10 years

Sustainable USP Nicotine Model

We are Committed to Sustainability and to
Supply Chain Integrity

Good
Agricultural
Practices

Farmer
Training

Process
Optimization,
Accountability
and
Traceability

Forestry and
Natural
Resource
Management

Fair Labor
Practices

Social
Development



Universal Commitment to Sustainability and Product Integrity



The Seven ALP* Principles



Child
Labor



Income and
Work Hours



Fair
Treatment



Forced
Labor



Safe
Environment



Freedom
Of Association



Compliance
With Law

* ALP – Agronomic Labor Practices

Source: <https://www.industrydocuments.ucsf.edu/docs/szpp0298>

MOBILEAF™



MobiLeaf™ is a Universal-developed mobile software application that tracks farm data related to the complete life cycle of crops – from plant cultivation and harvesting to compliance with laws and industry standards. By combining GPS technology with an operating system that is compatible with today's most popular mobile and computer technology, MobiLeaf™ can be customized to meet the needs of organizations of various sizes and locations.

- Cultivation & Harvesting Data
- Compliance Data
- Accuracy & Efficiency



Universal Commitment to Sustainability and Product Integrity



The Four Pillars of Processing



Governance



Facilities



Environment



People

The Four Pillars of Agronomy



Governance



Crop



Environment



People

Sustainable USP Nicotine Model

ULT Vertically Integrated Supply Chain

- We have surveyed tobacco varieties around the world.
- Apart from India, varieties from the Philippines, Brazil, Spain and Poland look promising.
- To match JUUL'S growth plans:
 - ULT will build and operate extraction and/or purification operations in Europe and/or Asia
 - Italy
 - Philippines
- Work closely with JUUL to improve quality and optimize cost.

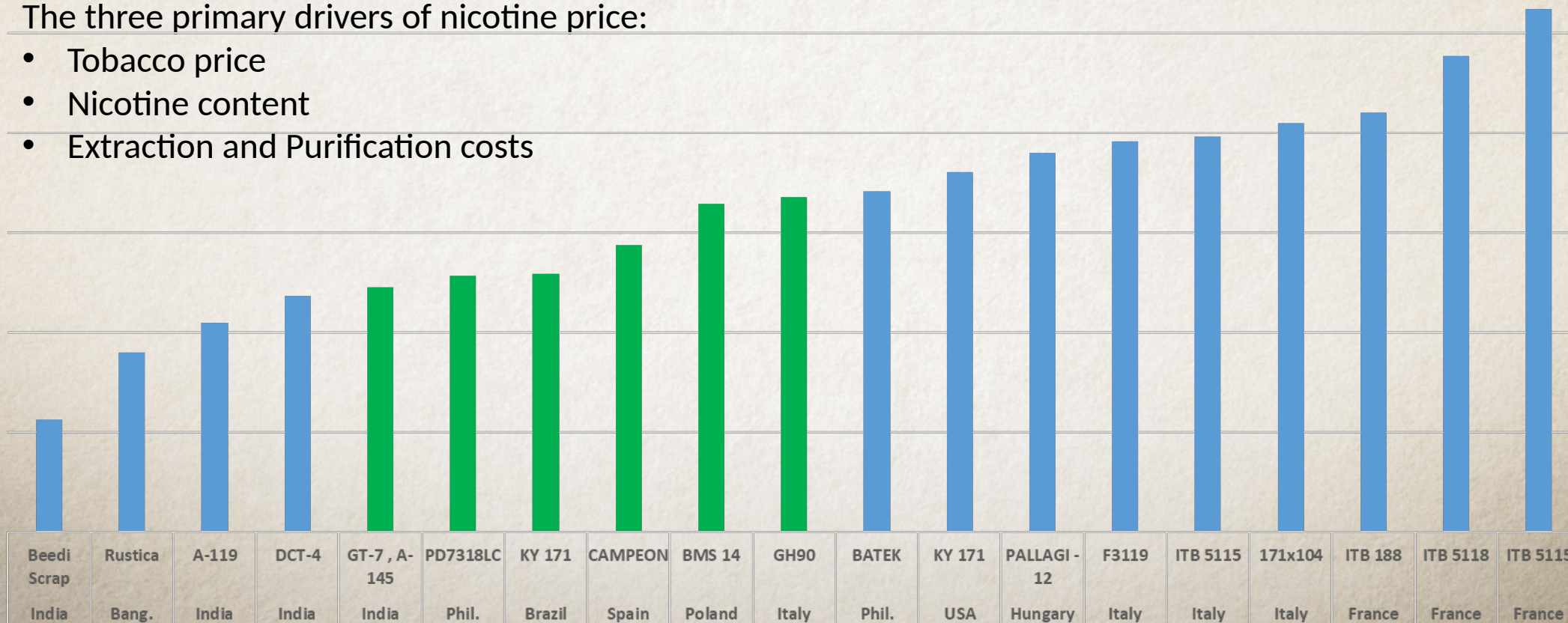


Relative Price Index for USP Nicotine

Relative Price Index

The three primary drivers of nicotine price:

- Tobacco price
- Nicotine content
- Extraction and Purification costs



Sustainable USP Nicotine Model



The Future of Nicotine – ULT and JUUL

- We wish to become a strategic partner and preferred supplier.
- Fully traceable, compliant, socially responsible raw material production
 - In conformance with all of ULT's supply chain integrity policies and programs
- ULT will work with JUUL to develop and implement a high quality supply chain
 - Kosher
 - REACH
- **Work together to develop a more transparent model.**

Universal - Other Services

GLOBAL LABORATORY
Services, Inc.



- Located in Wilson, NC
- Quality Management Systems
 - ISO/IEC 17025, A2LA accredited
 - Follows cGMP guidelines
- Staffing
 - 45 full-time employees

Universal - Other Services



ENDS Product Testing of Liquid and Vapor

- Mainstream smoke and vapor testing
- Harmful and Potentially Harmful Constituents (HPHC)
 - E-Cigarettes – tobacco extract, liquids and vapor
- Pesticide and other Crop Protection Agents (CPA) in e-liquids
- Genetically Modified Organism (GMO) testing
- Stability Studies
- USP Nicotine Testing
- Method Development per Client Request

Sample of HPHC Analysis for E-liquids & Vapor	
Acetaldehyde	Diacetyl
Acetyl Propionyl	Diethylene glycol
Acrolein	Ethylene glycol
Acrylonitrile	Formaldehyde
4-Aminobiphenyl	Glycerol
1-Aminophthalene	Isoprene
2-Aminonaphthalene	Lead
Ammonia	Menthol
Anabasine	Nickel
Benzene	Nicotine
Benzo[a]pyrene	NNK
1,3-Butadiene	NNN
Cadmium	Propylene glycol
Chromium	Toulene
Crotonaldehyde	pH

