



E-cigarettes: Market developments

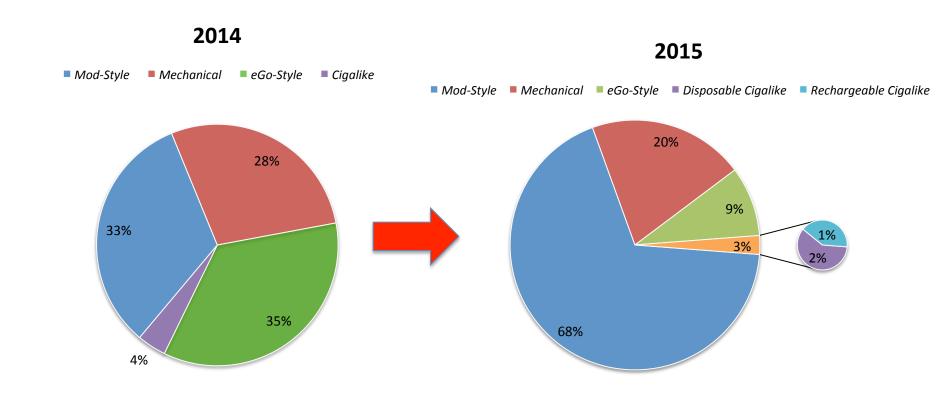
21st October 2015

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Agenda

- Introduction
- ECF Survey results: e-cig consumption patterns
- Decline in C-store sales
- Pricing pressure
- Growth through other channels vape store / online
- Regulation and the TPD
- Outlook

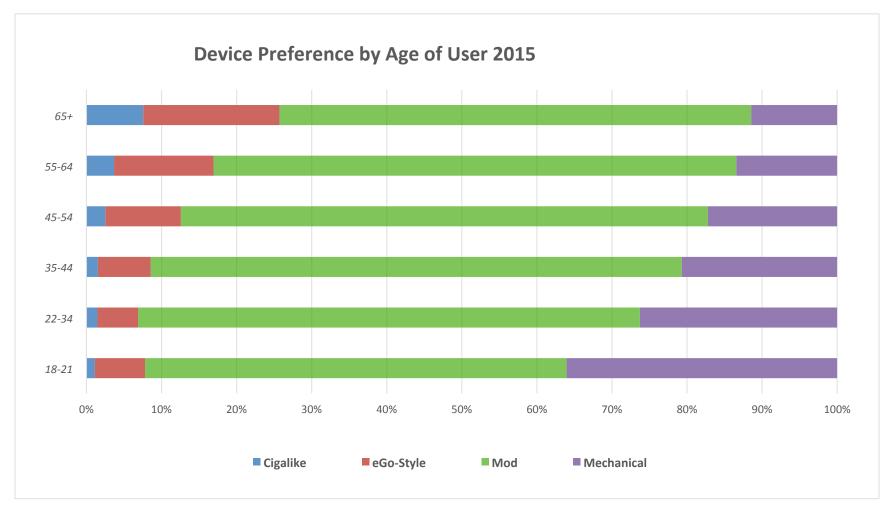
ECF Survey analysis 2015: primary device usage





Source: E-Cigarette Forum survey of 7,000+ US vapers from the forum carried out in Spring 2015 compared to results of same survey in 2014; Report published Oct 2015 available http://ecigintelligence.com/product-category/premium-reports/

Primary device by age of user

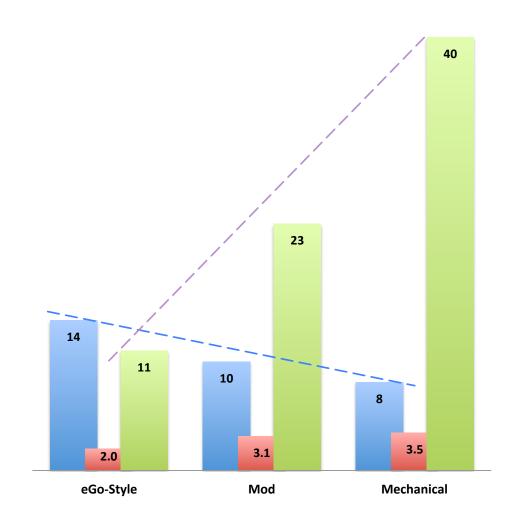




Source: E-Cigarette Forum survey of 7,000+ US vapers from the forum carried out in Spring 2015

Consumption by device

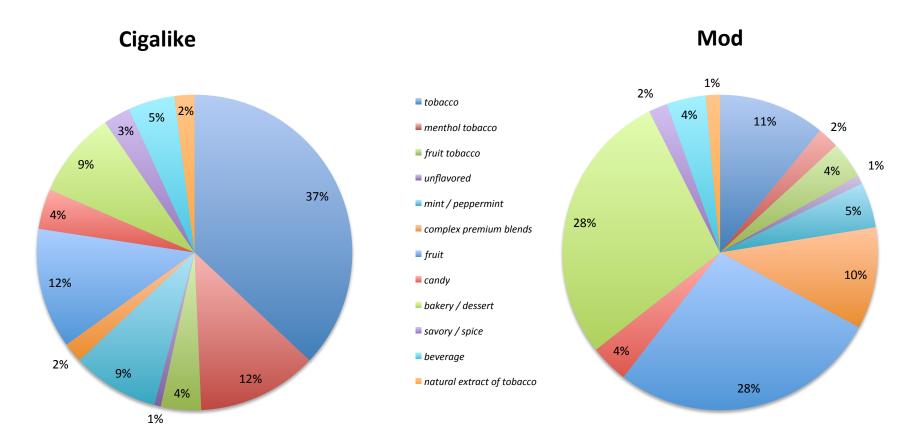
- nicotine strength
 (mg/ml)
- e-liquid (ml) per day
- power output of device (W)





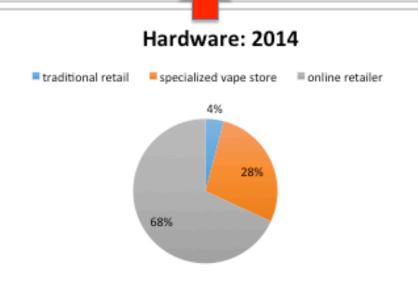
Source: E-Cigarette Forum survey of 7,000+ US vapers from the forum carried out in Spring 2015; Device-Specific Consumption Trends (Solus & Dual Users, 2015)

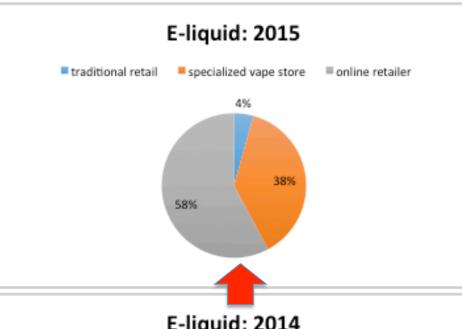
Flavour preferences 2015

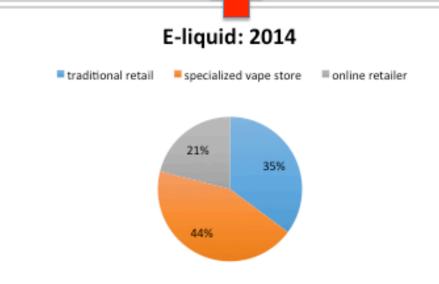


US distribution channels: liquids move online









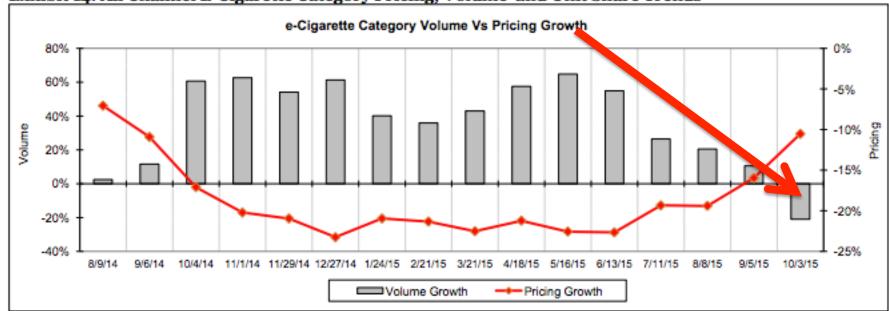


Source: E-Cigarette Forum survey of 7,000+ US vapers from the forum carried out in Spring 2015 compared to results of same survey in 2014

C-store decline

- c. -30% \$ value yr on yr
- Price: -10%; Volume: -20%
- C-store only now represents c.1/3rd of total US market distribution

Exhibit 14. All Channel E-Cigarette Category Pricing, Volume and Unit Share Trends



Source: Nielsen Total US xAOC Including Convenience Database and Wells Fargo Securities, LLC



Source: Wells Fargo/Nielsen October 2015

US pricing pressure

Down, down, down

There has been a significant downward trend in U.S. online prices for rechargeable cigalike starter kits, cartomisers, and e-liquid over the last 12 months.



The budget buy?

Once, vaping on a budget seemed a no-brainer: cigalikes cost much less than the other options. But by mid-2015, the average price of eGo-style starter kits had slipped below the average of rechargeable cigalike starter kits for the first time.

Does this really make the eGo devices cheaper, though? It's a tougher question than some shoppers may realise.

True, a first purchase of e-liquid costs about another \$10 on top of the eGo kit, which drives up the initial investment. But over the longer term, the eGo approach offers more cost-effective vaping. So the consumer's choice is more complex now than simply comparing price tags.





Source: ECigIntelligence US online pricing analysis, Sept 2015 vs Sept 2014 www.ecigintelligence.com

US: hardware price resilience

No pressure

Prices vary dramatically for identical box mods sold by the top ten multi-brand sites. This suggests there is little competitive pressure on prices in the U.S. online e-cigarette market for these products.



Bang for the buck

Despite the wild price variations shown above, box mods do – unsurprisingly – become consistently more expensive as their power output increases.

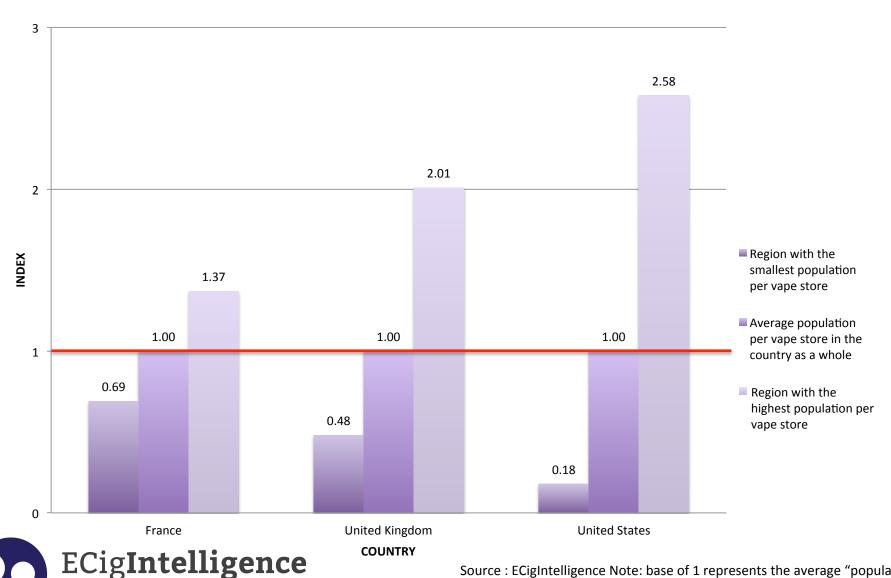




Source: ECigIntelligence US online pricing analysis, Sept 2015 www.ecigintelligence.com

Vape store distribution: UK, France, and the US

Regulatory and Market Intelligence for the E-Cigarette Sector



Source : ECigIntelligence Note: base of 1 represents the average "population per vape store" in the country as a whole

Vape store distribution: US vs France

Regulatory and Market Intelligence for the E-Cigarette Sector



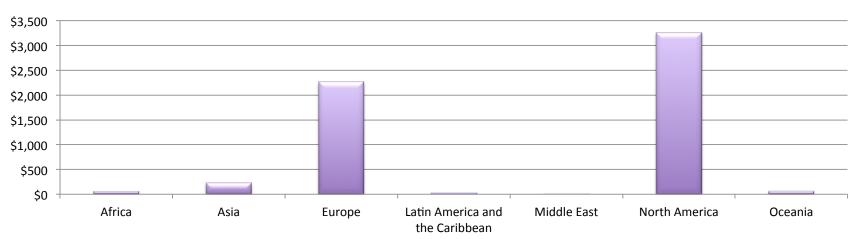


Vape shop numbers: as at 15 Feb 2015, PGVG magazine - dedicated

vape shops receiving PGVG magazine

Global E-cigarette Market Size

2015, \$USD million

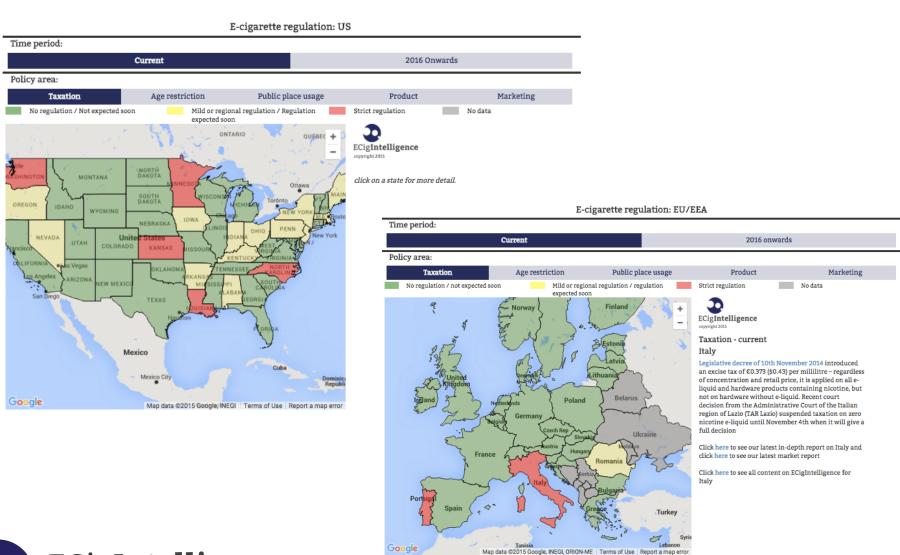


- Europe and U.S. markets dominate globally
- High growth expected in Asia and other markets over next 5 years
- China and India to open up?



Source: ECigIntellligence proprietary market sizing models and database September 2015; Europe is based on the UN descriptions: Europe includes EU28, Russia and Eastern Europe; North America: USA and Canada; other regional groupings based on UN descriptions (2015)

Regulation: International Patchwork



Impact of TPD on EU market

Level playing field: companies and **Lack of harmonization**: the TPD gives investors understand "rules of the EU member states huge scope to game" adopt different restrictions from one Consumer confidence: regulated another products give customers much-needed **Product restrictions**: unnecessary security, particularly new users limits on product characteristics **Speed to market**: notification rather **Marketing restrictions**: likely than pre-approval (cf. US deeming widespread advertising bans Costs: heavy regulatory burden, regs.)

particularly on small manufacturers

and distributers

Outlook

- More pre-TPD restrictions implemented
- Vape shop consolidation/professionalization
- Heat-not-burn and other nicotine products further innovation and variation
- Tax
- New markets (e.g. Germany, Russia, Asia?)