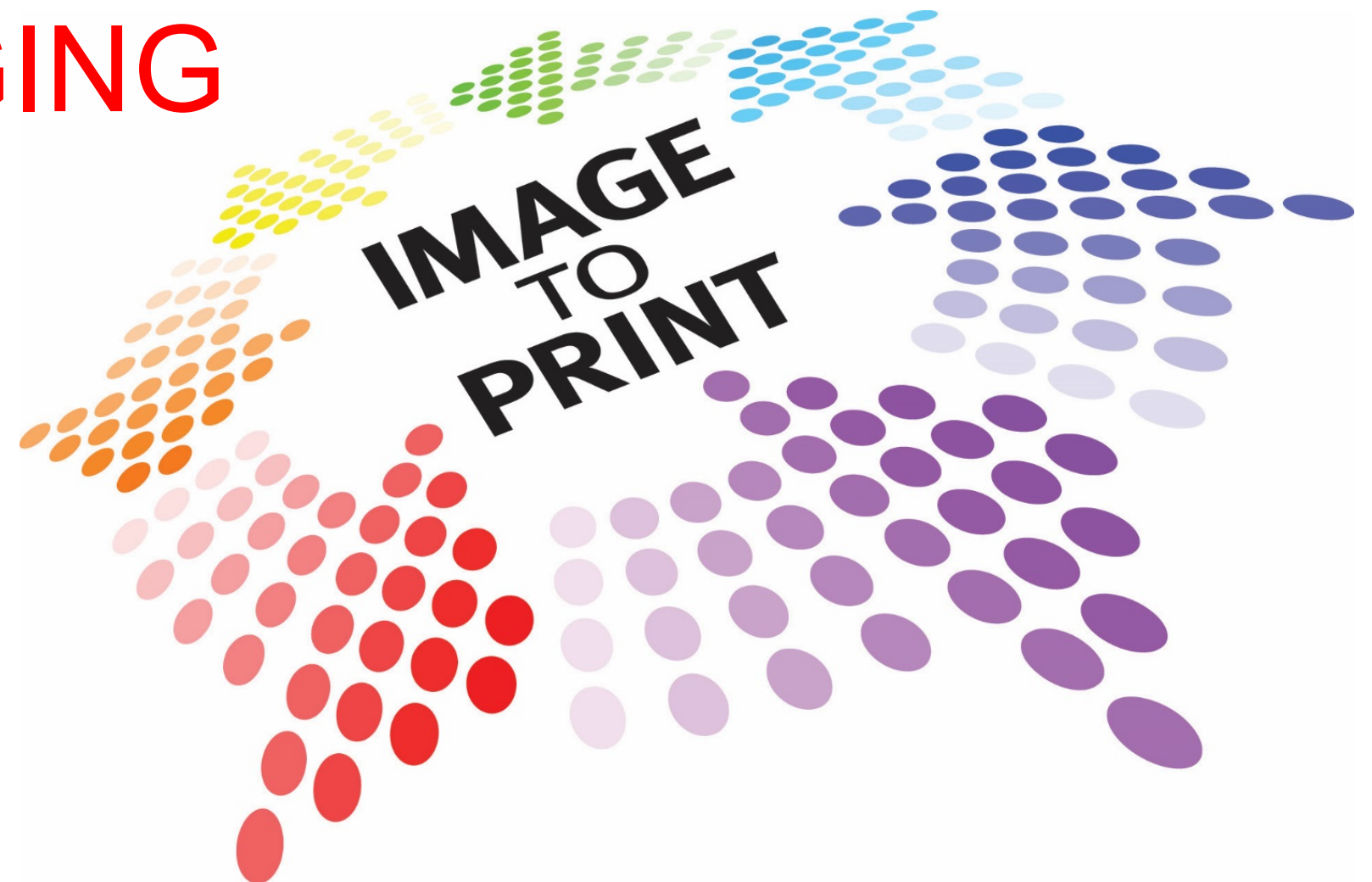


PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

20 / 21 March 2019
Jakarta, Indonesia



PRINTING TECHNOLOGY & INNOVATION DAYS FOR FLEXIBLE PACKAGING

HOSTED BY:

janoschka



PRINTING TECHNOLOGY & INNOVATION
DAYS FOR FLEXIBLE PACKAGING

Toluene Free Solution for Gravure Printing

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Packaging, Siegwerk



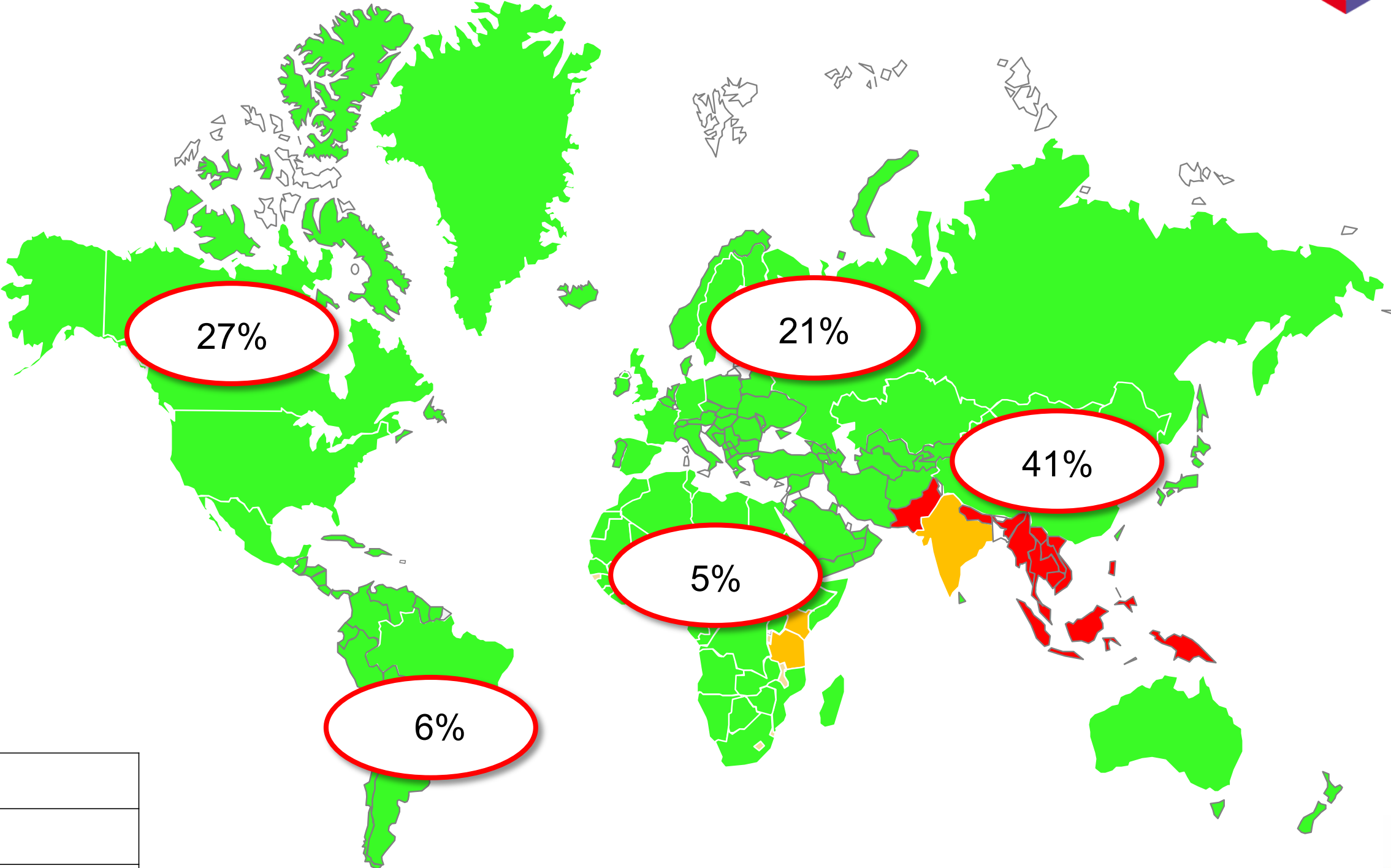
Agenda



- The future of packaging is toluene free
- Toluene free solutions



The future of packaging is toluene free

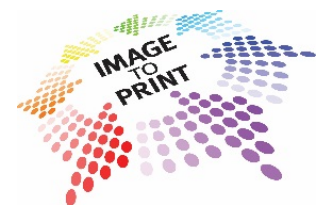
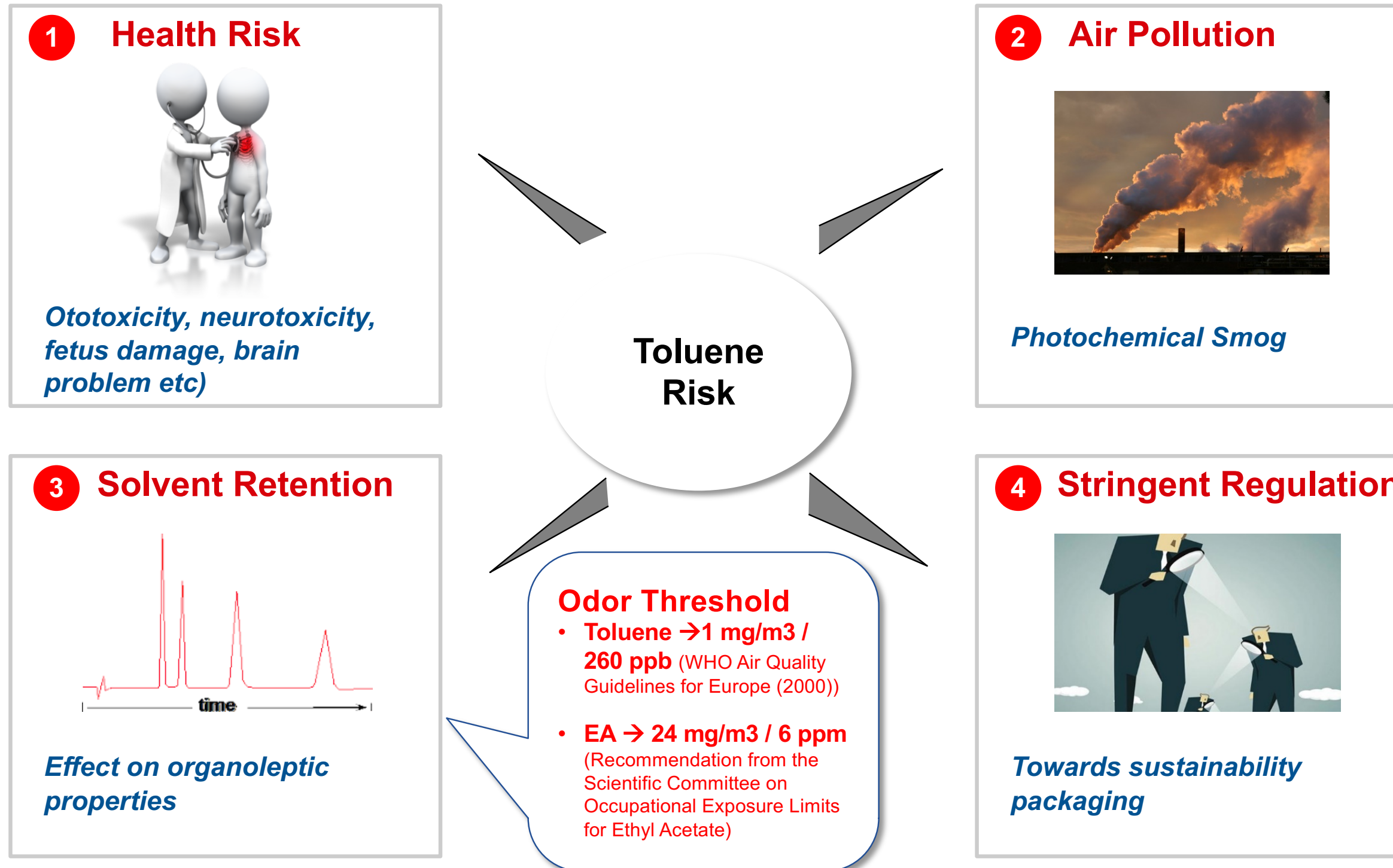


	Toluene Free
	Toluene Based
	Moving towards Toluene Free

*Flexible Packaging: State of the Industry Report (Flexible Packaging Association) October 2017, Euromonitor



Toluene has potential Occupational (Health) and Product Safety risks



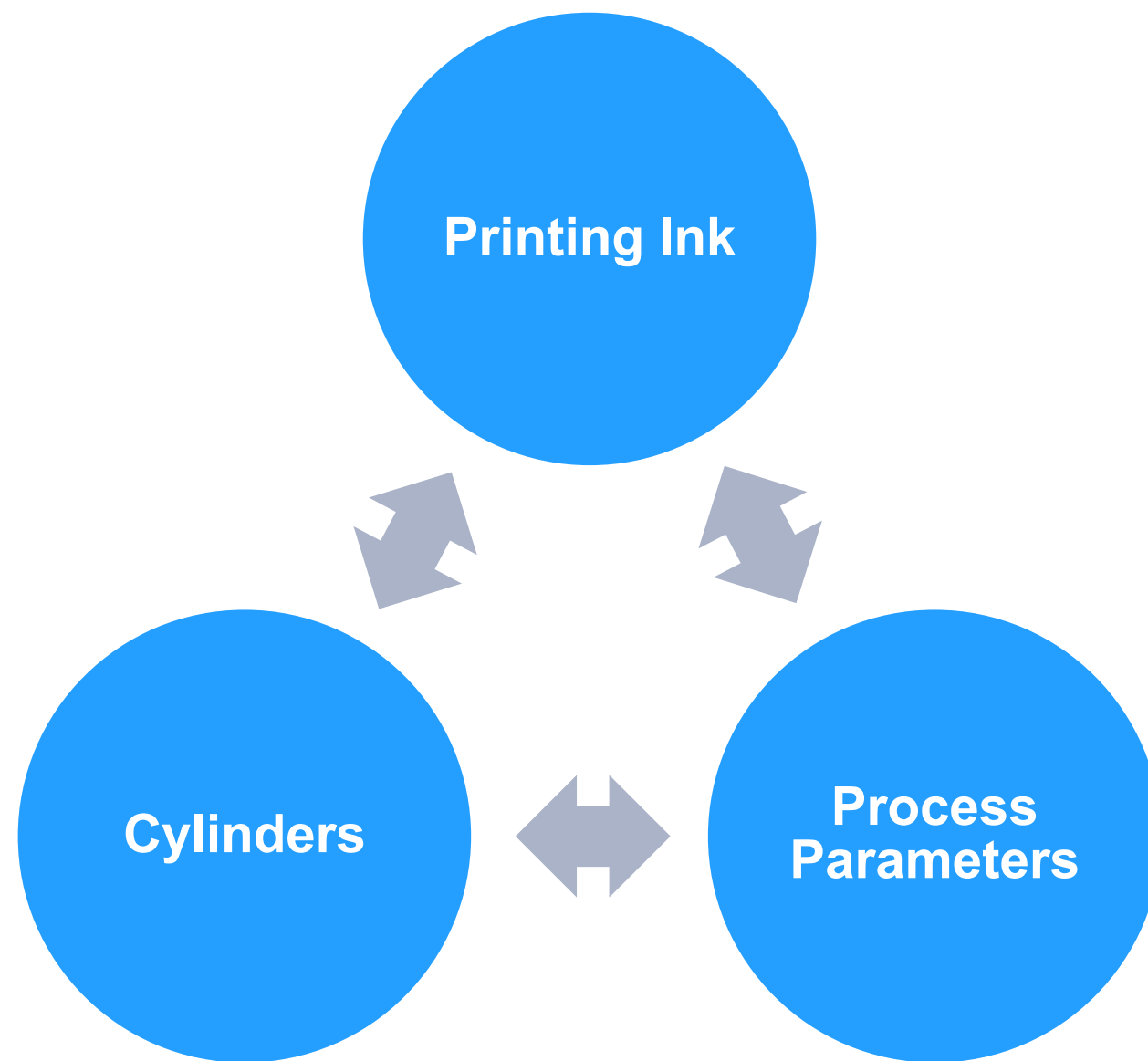
Agenda



- The future of packaging is toluene free
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Effective transition to Toluene free ink



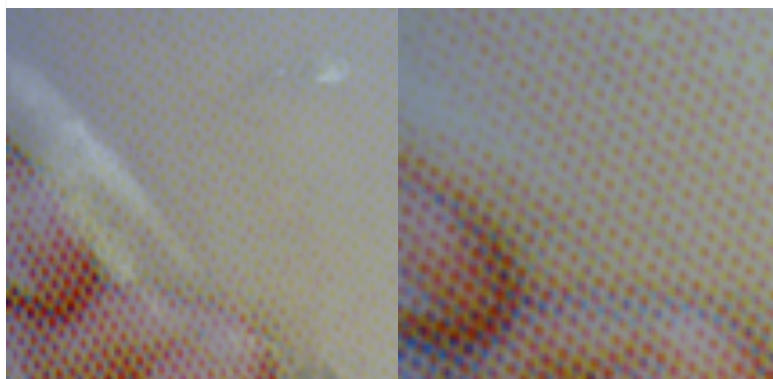
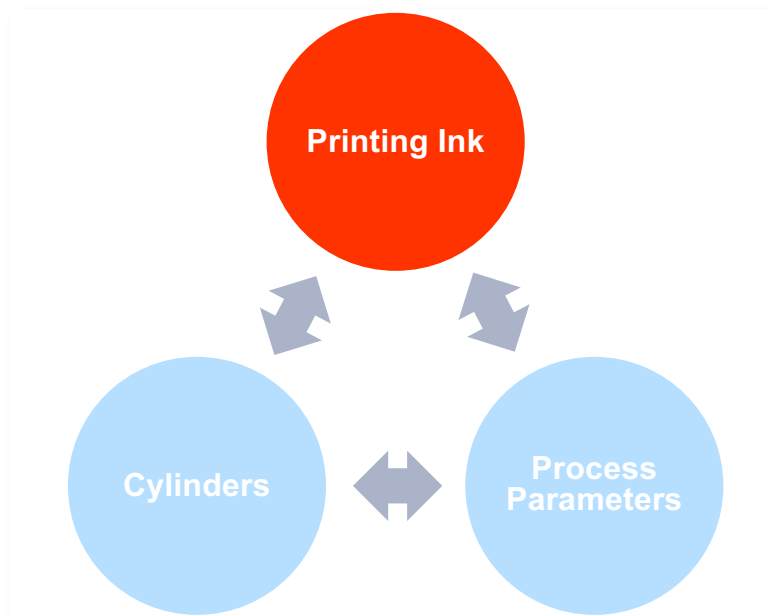
careful optimization of various
setup, materials & process
parameters

- ✓ successful transition
- ✓ high printing speed
- ✓ Total cost efficiency

**Proven experience
across Asia**



Printing Ink



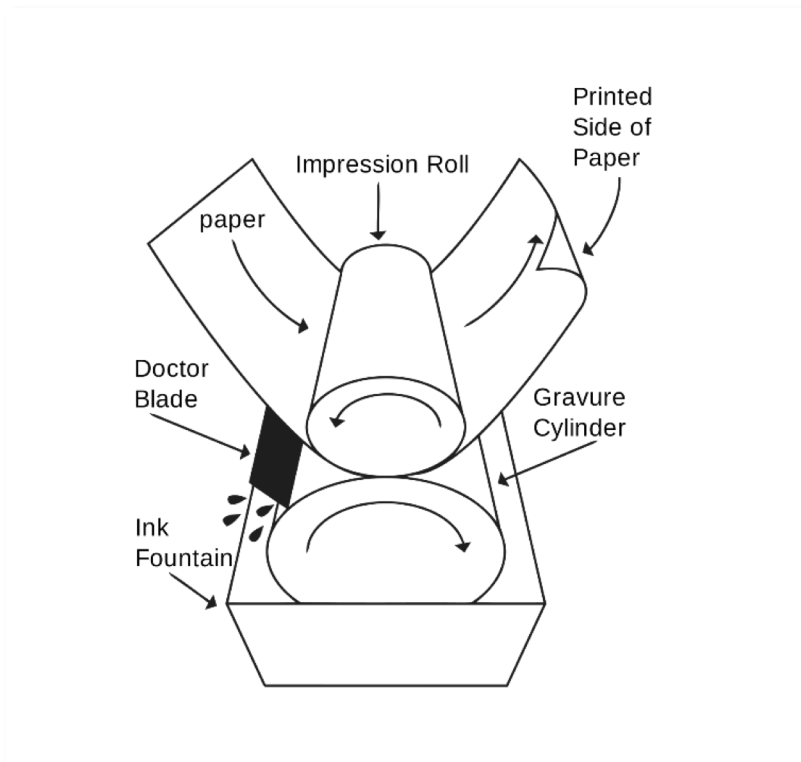
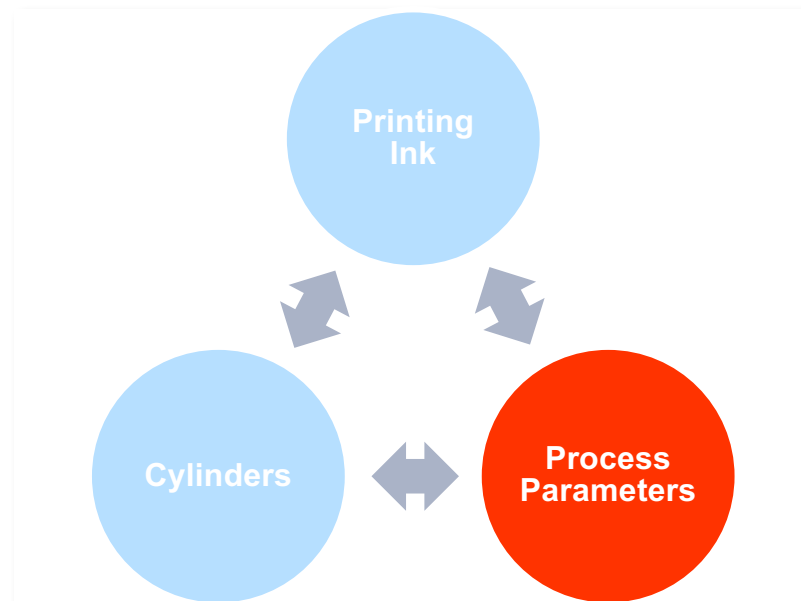
Optimized ink formulations available with

- **Optimized dispersion and color development.**
 - High color strength available, with stable performance and ink transfer
- **Careful selection of polymer blend:**
 - improve transfer capability
- **Right solvent balance:**
 - perform continuous print efficiency

→ **Leads to high print definition and total cost efficiency.**



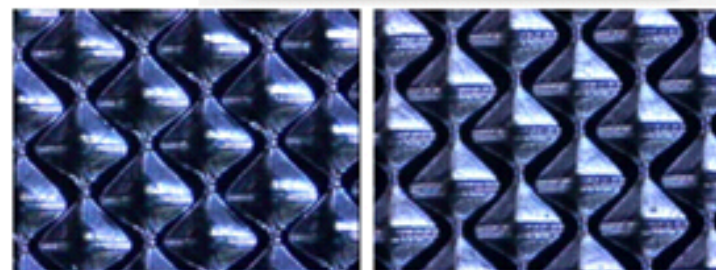
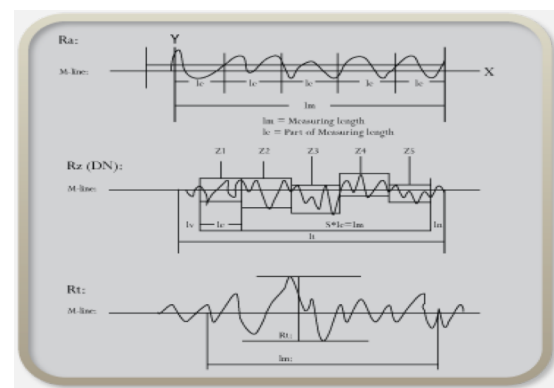
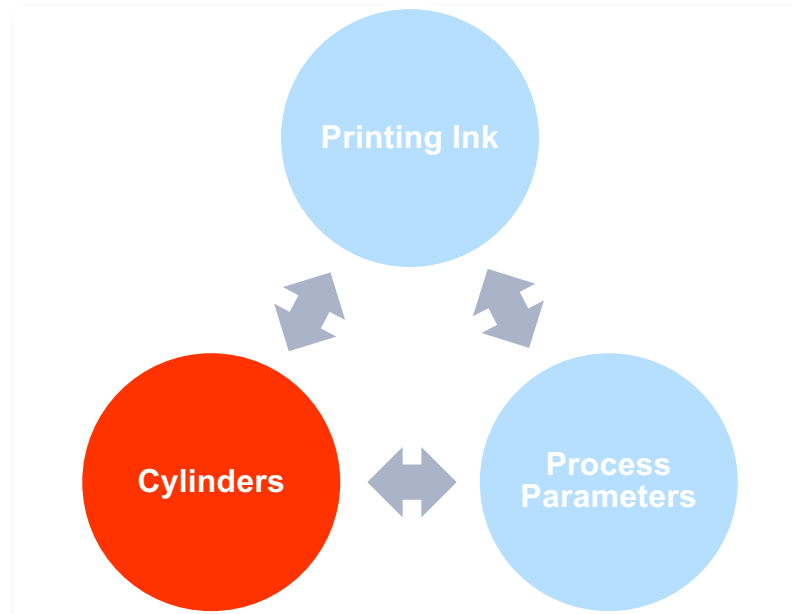
Process Parameters



- **Auto viscosity controller:**
 - maintain uniform ink viscosity and solvent balance
 - **Ink cooling system:**
 - control ink drying rate to minimize solvent evaporation & ensure consistent printing for long run
 - **Adjustments on other influencing parameters**
 - Impression roller type & hardness
 - Printing Speed (considering drying capacity performance)
 - Doctor Blade type, angle & pressure
- **Leads to high print speed and total cost efficiency**



Cylinder Parameters



120° 70R

130° 70R

- **Cylinder roughness**
 - Optimized Ra & Rz values to avoid scumming
- **Engraving parameters**
 - Change of stylus angle to reduce coating weight of ink while maintaining good printability and color strength
- **Laser Cylinders**
 - Better ink transfer, Smooth ink lay down & High print definition

„Digiform“

- Laser exposed and chem. Etched
- for Metallics & Solids

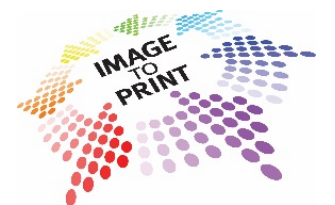
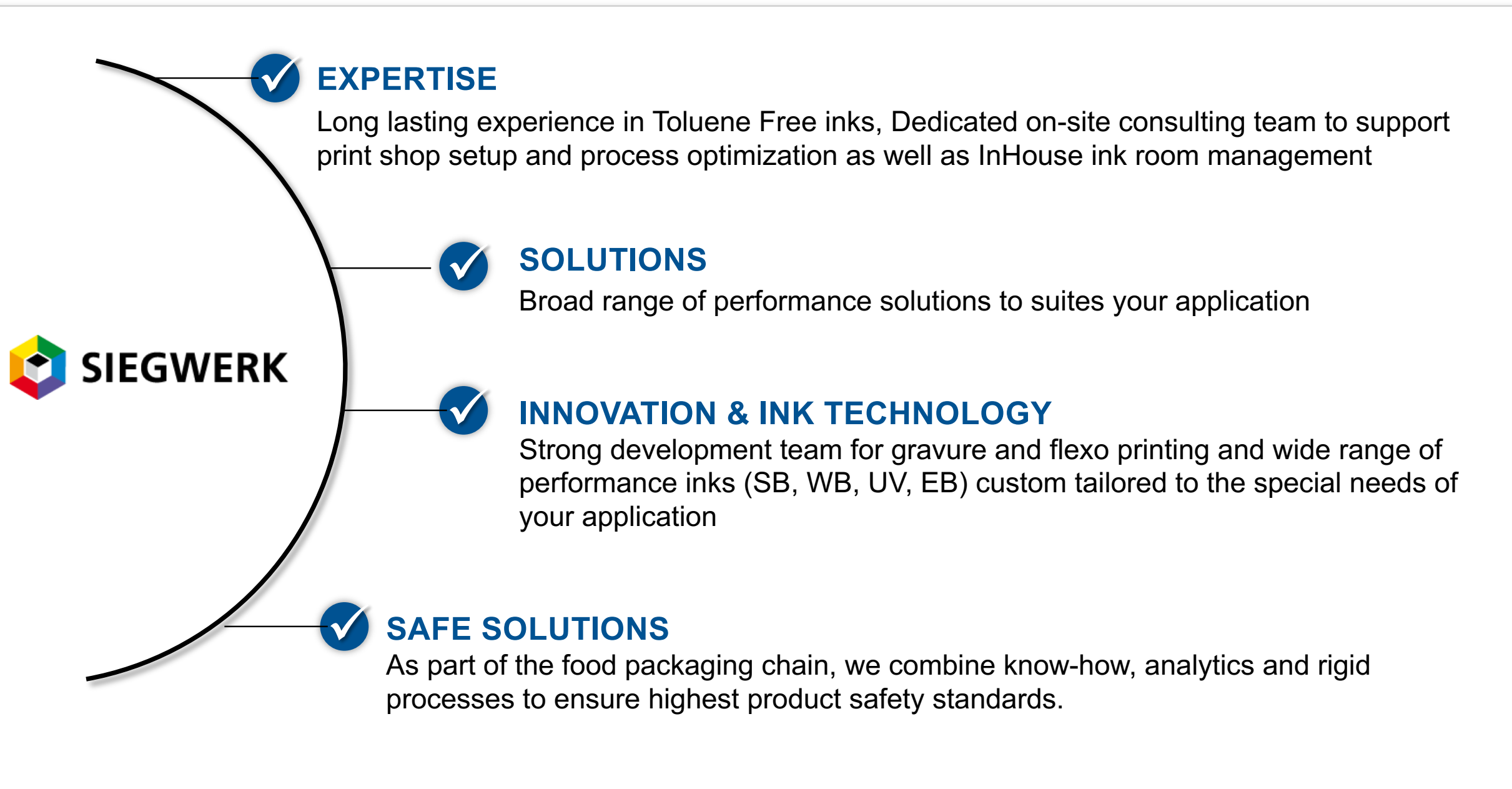
„Direct Laser“

- Half tones and metallics

→ **Leads to high print definition and total cost efficiency**



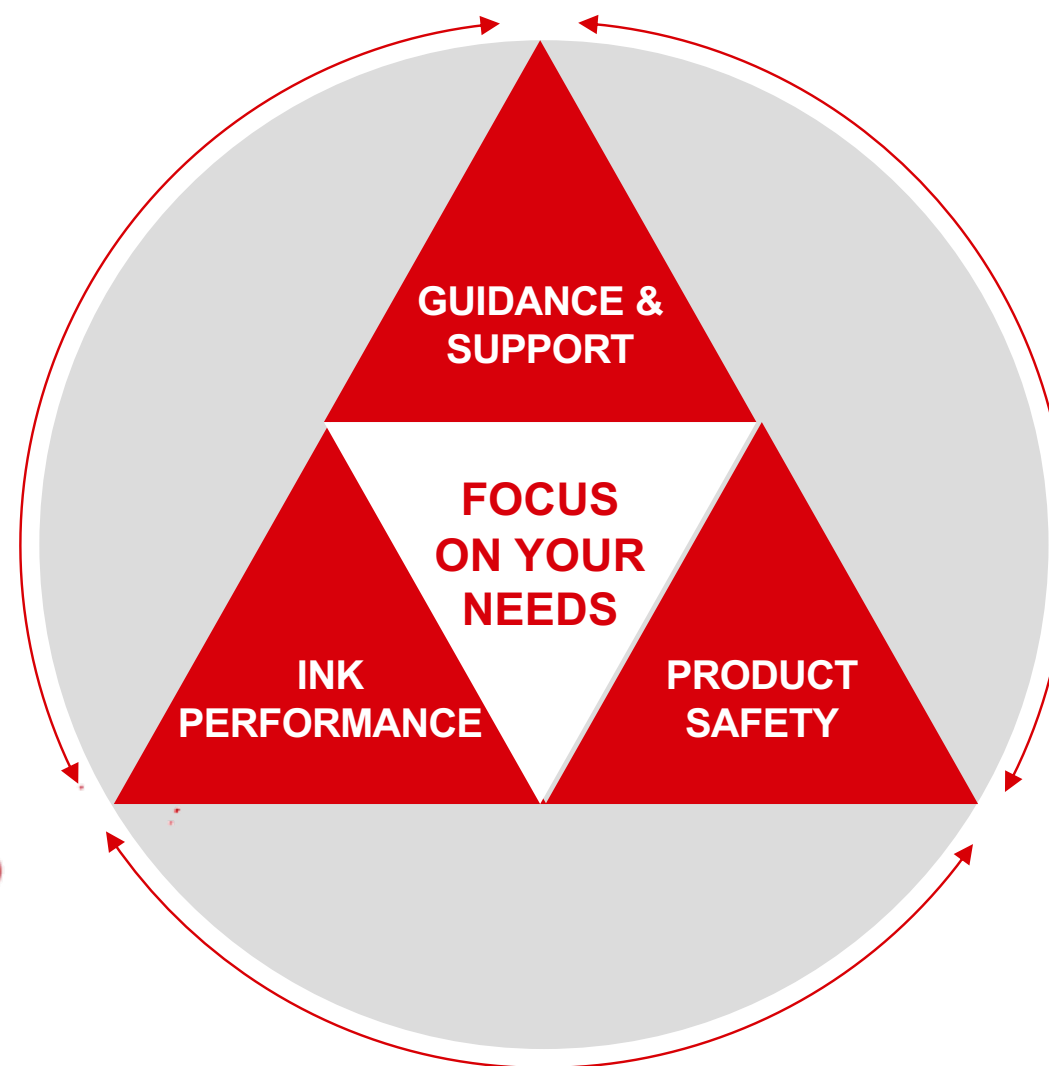
Guidance and Support – Transition to Compliant Ink system



We guide you to efficient & safe performance



INK, HEART & SOUL



THANK YOU FOR YOUR ATTENTION.

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